SIEMENS

Gigaset WLAN Repeater 108

Total 802.11 Super G ATHEROS EXTENDED RANGE

CORDLESS HOME COMMUNICATION Gigaset

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Safety precautions

- Only use the mains adapter (5V DC 1A) that is supplied with the Gigaset WLAN Repeater 108. Comply with the connection values and ratings when connecting the device to the mains power supply.
- Protect the device from damp.
- Never open the device. For reasons of electrical safety it may only be opened by authorised service technicians.
- The device may affect medical equipment. Take account of the technical conditions in the relevant environment.

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Introduction

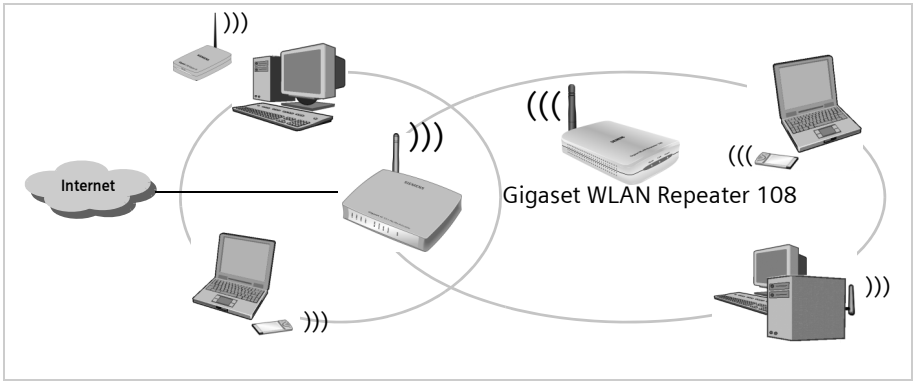
The Gigaset WLAN Repeater 108 offers various possibilities for use in wired and wireless networks. It enables very simple wireless integration of remote PCs into a network. You can also provide wireless access to a wired network.

Possible uses

You can use your Gigaset WLAN Repeater 108 in various functions in your network. The device provides three operating modes that you can choose to suit your requirements.

Use as Repeater

The Gigaset WLAN Repeater 108 can be used to increase the coverage of your wireless network. Set it up within the range of your network. The Gigaset WLAN Repeater 108 will now transmit data traffic into its own wireless area. This allows you to set up wireless networks that cover a much larger area than would be possible with just one wireless router (e.g. Gigaset SE551 WLAN dsl/cable).



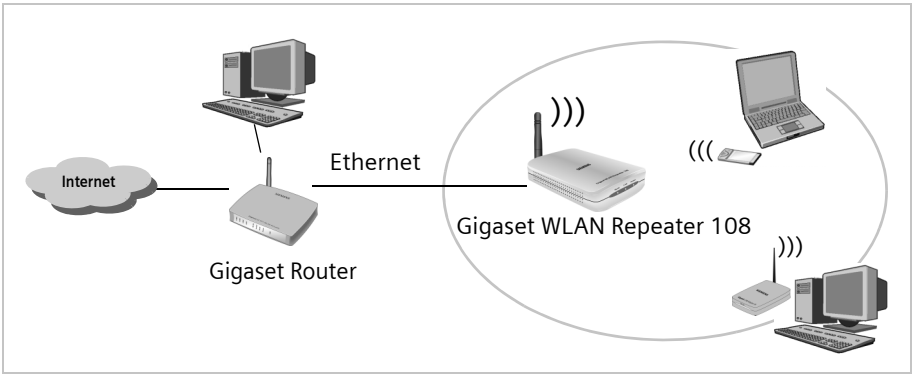
In this case you need to operate your Gigaset WLAN Repeater 108 in **Repeater** Operating Mode.

PCs that you wish to connect to a wireless local network via a Gigaset WLAN Repeater 108 must have a wireless network adapter, such as a Gigaset USB Adapter 108.

Use as access point in conjunction with a Router

The Gigaset WLAN Repeater 108 permits wireless connection of PCs to a wired local network. For example, the Gigaset WLAN Repeater 108 can be connected via an Ethernet cable to an Ethernet router, thus providing further PCs with wireless access to this network. It is also possible to connect the Gigaset WLAN Repeater 108 away from (e.g. on the first floor) the Ethernet router (which is in the cellar for example) using cable.

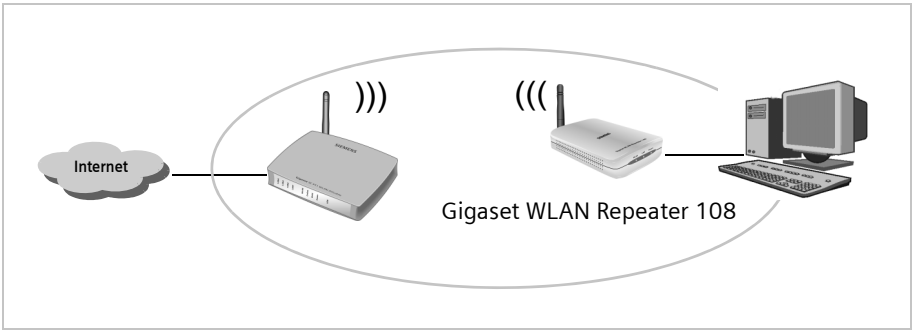
In this case you need to operate your Gigaset WLAN Repeater 108 in **Access point** Operating Mode.



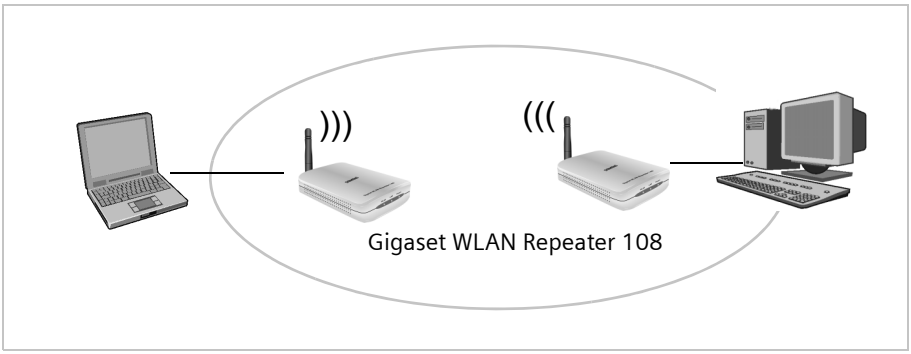
Use as wireless network adapter

The Gigaset WLAN Repeater 108 can be connected directly to the Ethernet port of a PC or other device (e.g. a games console, set-top box). It then functions as a wireless network adapter, but uses the device's wired Ethernet port. You do not need to install any additional driver software on the device. This ensures that access to the wireless network is independent of the operating system.

When you set up a connection from a computer or other device to an access point using the Gigaset WLAN Repeater 108, you operate the Gigaset WLAN Repeater 108 in **Ethernet adapter** Operating Mode.

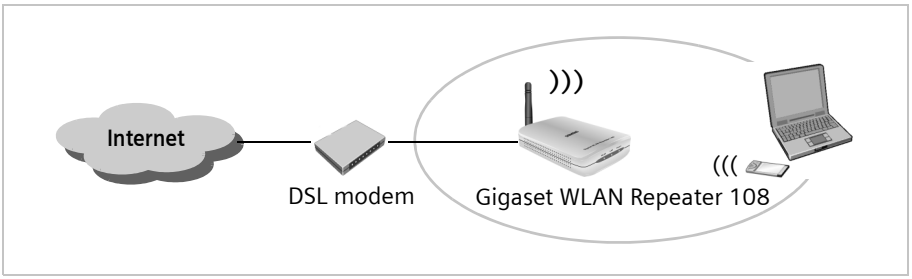


If you want to set up a wireless connection between two PCs or other devices using the Gigaset WLAN Repeater 108, you have to use one Gigaset WLAN Repeater 108 in **Access point** Operating Mode, and all others in **Ethernet adapter** Operating Mode. An example of this configuration, a wireless connection between two games consoles, can be found on page 80.



Use for accessing the Internet with a PC

The Gigaset WLAN Repeater 108 permits wireless Internet access for a PC. Here it is operated in Access point **Operating Mode**, connected directly to a DSL or cable modem. However, simultaneous Internet access for several PCs is not possible. This requires a wireless router (e.g. a Gigaset SE551WLAN dsl/cable).



To access the Internet, a DSL or cable modem is required. You also need an Internet Service Provider for Internet access. The Internet access is configured using the software from your Internet Service Provider. The Gigaset WLAN Repeater 108 does not require any further configuration.

Security functions

You can use various encryption methods and authentication methods (WEP, WPA/WPA2-PSK,WPA/WPA2, MAC access control) to prevent unauthorised access to your wireless LAN or make data illegible to unauthorised parties. The security settings available to you depend on the **Operating Mode** you select and the components used in your local network.

First Steps

Contents

The package contains the following components:

- one Gigaset WLAN Repeater 108
- one mains adapter (5V DC, 1A)
- one Ethernet cable (CAT5)
- one power supply cable for the Gigaset WLAN Repeater 108 fed by a USB interface (e.g. on the PC)
- one CD containing this user guide and the "Gigaset WLAN practical tips" document
- one Quick Start Guide

System requirements

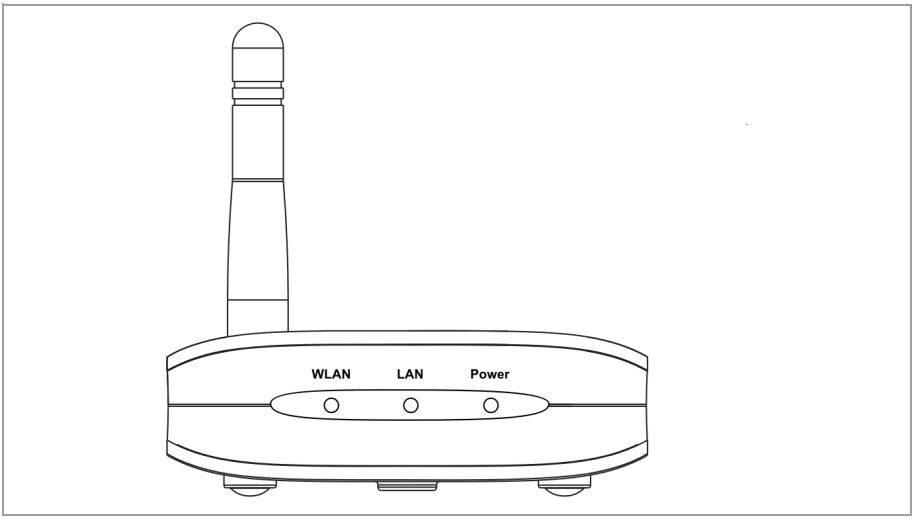
To operate your Gigaset WLAN Repeater 108 you need

- a PC with
  - a Gigaset PC Card 108, a Gigaset USB Adapter 108 or a different 802.11g or 802.11b compatible wireless network adaptor

    and/or
  - an Ethernet card,
- a Web browser, e.g. Microsoft Internet Explorer 6.0 or higher, Mozilla Firefox 1.0 or higher, to configure your repeater.

Operating displays and connections

Front panel



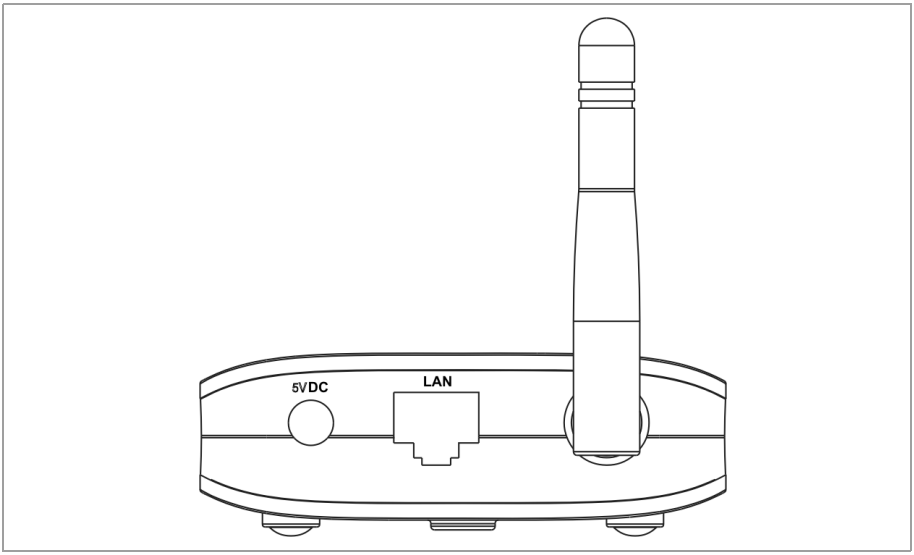
LED displays

The front panel of the Gigaset WLAN Repeater 108 contains LED displays that show the operating state and simplify installation and fault finding in the network.

The LED's show the following:

LED	State	Status
WLAN	On	There is a wireless connection to the local network.
	Flashing	◆ The Gigaset WLAN Repeater 108 is sending or receiving data on its WLAN interface. ◆ New firmware is being loaded on the Gigaset WLAN Repeater 108 or the Gigaset WLAN Repeater 108 is rebooting.
	Off	The WLAN interface is not active.
LAN	On	There is a connection to the local network via the Ethernet cable.
	Flashing	The Gigaset WLAN Repeater 108 is sending or receiving data via the Ethernet cable.
	Off	There is no connection to the local network via the Ethernet cable.
Power	On	The Gigaset WLAN Repeater 108 has been powered up.
	Off	The Gigaset WLAN Repeater 108 has been powered down.

Back panel



The back panel of the Gigaset WLAN Repeater 108 houses the following sockets.

Element	Description
5VDC	Socket for the mains adapter supplied **Please note:** Using the wrong power supply unit may damage the repeater.
LAN	Socket for an Ethernet cable

Reset

The reset button is located behind the small opening on the underside of the device.

- Restart function: Press the reset button for longer than 1 second but less than 5 seconds to reboot the device. This does not affect the configuration settings.
  The WLAN LED flashes while the device restarts. This may take several minutes.
- Reset function: Press the button behind the small opening on the underside of the device for at least 5 seconds to return all settings to the factory settings.
  Warning: This will clear all the configuration settings you have made.
  Updated firmware will not be affected.

Please note:

While the device is rebooting the reset button does not function. To trigger the restart or reset function, please wait until the WLAN LED has stopped flashing.

Setting up the Gigaset WLAN Repeater 108

The Gigaset WLAN Repeater 108 can be set up in any suitable location in the home or office. You do not need any special wiring. However, you should comply with the following guidelines:

- Operate the Gigaset WLAN Repeater 108 only indoors within a temperature range of +5 to +40 °C. Do not position the Gigaset WLAN Repeater 108 near sources of heat. Do not cover the ventilation slots. High temperatures will reduce the transmitter range.
- A suitable mains socket and a connection to the Ethernet socket of a PC or a wired network must be available where you set up the Gigaset WLAN Repeater 108.
- Do not position the device in the immediate vicinity of stereo equipment, TV sets or microwave ovens. This may cause interference.
- Position the Gigaset WLAN Repeater 108 on a non-slip surface.

  The router feet do not normally leave any traces on the surface they are on. However, some furniture surfaces may contain substances that attack and soften the router's plastic feet. This may cause the feet to mark the furniture surface.
- Position the Gigaset WLAN Repeater 108 in such a way that it cannot fall down and damage the antenna.
- Do not place the Gigaset WLAN Repeater 108 on a heat sensitive surface.
- Lay the cables so that nobody can trip over them. You should not cover the cables with anything.
- Protect the Gigaset WLAN Repeater 108 from dampness.

Connecting the Gigaset WLAN Repeater 108

Set up the Gigaset WLAN Repeater 108 at the required location.

To a wired network (LAN), a PC, a games console or a modem

➔ Plug one end of the Ethernet cable into the socket marked LAN on the Gigaset WLAN Repeater 108.

➔ Plug the other end of the Ethernet cable into the device to which you wish to connect the Gigaset WLAN Repeater 108.

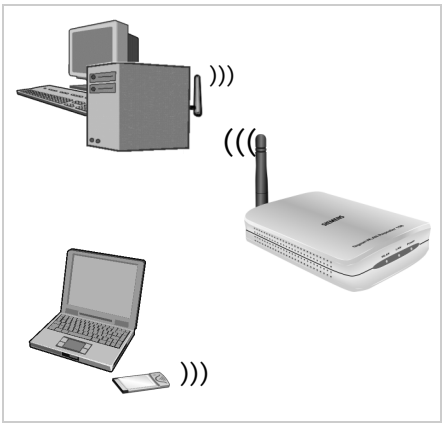
Depending on the particular application, this could be a router, a PC, a games console or a DSL/cable modem.

Please note:

Depending on the use, you will first have to make some settings via the browser-based configuration program of your Gigaset WLAN Repeater 108. We therefore recommend that you first connect the device to a PC using an Ethernet cable.

Wirelessly to a PC

A wireless connection is made using a wireless network adapter that must be installed in your PC.



A wireless network is defined by assigning an identical SSID to all the devices. The default SSID of the Gigaset WLAN Repeater 108 is **ConnectionPoint**.

➔ Therefore, enter **ConnectionPoint** as the SSID on the wireless network adapter in your PC, and deactivate encryption if necessary. The user guide belonging to the device will tell you how to do this.

If the correct SSID has been entered in your PC's wireless network adapter, the wireless link will be established automatically once you connect your Gigaset WLAN Repeater 108 to the mains power supply.

Aligning the antenna

➡ Align the antenna.

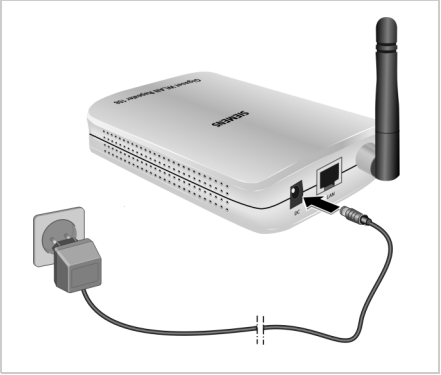
The antenna should be at right-angles to the communicating partner. The aerial can be turned sideways and backwards (away from the device).

The configuration and monitoring program provides information about the quality of the connection. Try out the antenna positions to see which gives the best results for your location.

Please remember:

Before your PC can communicate via the Gigaset WLAN Repeater 108, you must run network configuration on the PC (see page 82).

To the mains power supply



➡ Insert the round plug into the connection socket marked **5VDC** on the Gigaset WLAN Repeater 108.

➡ Plug the mains adapter into a socket to which no other devices are connected.

Please remember:

Never plug the mains adapter into a mains power socket if you are not sure that it complies with the values on the nameplate. The mains adapter and device could be destroyed and you might be injured.

Your Gigaset WLAN Repeater 108 is now ready for use.

- The power LED on the front lights up.
- The WLAN-LED flashes during startup and is on continuously when a wireless connection to the local network is established.
- The LAN LED lights up if you connect the Gigaset WLAN Repeater 108 using an Ethernet cable with a router or PC from your network.

The user interface

Your Gigaset WLAN Repeater 108 comes supplied with factory settings that normally allow it to be used as a repeater without comprehensive adjustments being necessary. However, you still have to set up the connection to the access point, for which you wish to extend the range with the Gigaset WLAN Repeater 108. If you wish to use your Gigaset WLAN Repeater 108 in a different Operating Mode (see page 5), you need to configure it.

If you use encryption in your wireless network, you must also use encryption and set the keys on the repeater.

You can use a browser-based configuration program that can be opened from a PC to carry out the configuration steps and to monitor operations. Detailed information is provided about the steps required. Necessary configuration steps are carried out automatically.

Please note:

- For initial configuration we suggest that you connect the Gigaset WLAN Repeater 108 with an Ethernet cable to the Ethernet port of the PC on which you wish to make the configuration. The Ethernet card should also be set to "Obtain an IP address automatically" (see Section "Assigning IP addresses automatically" on page 93).
- To start the configuration environment, you may need to deactivate the HTTP proxy for your browser (see page 83 for Windows XP, page 87 for Windows 2000 and page 91 for Windows 98 SE/ME).
- If you use the Mozilla Firefox browser or if you use Internet Explorer together with Windows XP Service Pack 2, you need to configure the popup blocker (see page 84 for Windows XP, page 87 for Windows 2000 and page 92 for Windows 98 SE/ME).

Launching the user interface

As described in the "First Steps" on page 9 chapter, you have connected your Gigaset WLAN Repeater 108 and made any changes necessary to the Ethernet card's network configuration (see the chapter "Integration in the network" on page 82). Your Gigaset WLAN Repeater 108 is connected to the mains power supply, the Power LED lights up, as does the WLAN LED. The LED for the local network lights up if you have connected a device directly using an Ethernet cable.

To access the Gigaset WLAN Repeater 108's user interface:

➔ Launch your Web browser.

➔ Enter the IP address of the Gigaset WLAN Repeater 108 in the browser's address field.

`http://192.168.2.254`

The login screen appears.

Please note:

If the DHCP server in your Gigaset WLAN Repeater 108 has been activated (factory setting), it may take a while after connecting to your PC until your PC is automatically assigned an IP address and you can access the configuration program.

Login
Welcome
You can use this interface to administer your device. For your security, the configuration program is protected with a password.
Please enter your password:
OK

➔ The factory settings password is ***admin***. Enter the password and click ***OK***.

Please note:

For security reasons you should change the password at a later stage (see page 36).

A screen with security information is displayed.

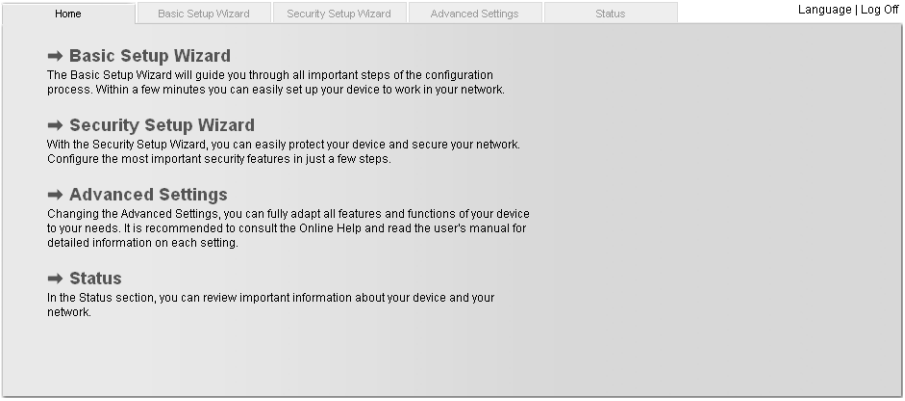
For the initial configuration you can skip this information. If you carry out all the basic and security settings using the wizard as described below, then your device and network are fully protected. If not, the next time you log on you will be informed of security gaps in the configuration program.

➞ Click on ***OK***.

You will now see the start screen.

The start screen

The start screen is the starting point for all configuration and administration activities.


Home
Basic Setup Wizard
Security Setup Wizard
Advanced Settings
Status
Language | Log Off
➞ Basic Setup Wizard
The Basic Setup Wizard will guide you through all important steps of the configuration process. Within a few minutes you can easily set up your device to work in your network.
➞ Security Setup Wizard
With the Security Setup Wizard, you can easily protect your device and secure your network. Configure the most important security features in just a few steps.
➞ Advanced Settings
Changing the Advanced Settings, you can fully adapt all features and functions of your device to your needs. It is recommended to consult the Online Help and read the user's manual for detailed information on each setting.
➞ Status
In the Status section, you can review important information about your device and your network.

Start screen functions

On the start screen you can

- select the language for the user interface (see page 19),
- call up the Basic Setup Wizard (see page 21),
- call up the Security Setup Wizard (see page 35),
- open the Advanced Settings menu for additional configuration options (see page 45),
- open the Status menu to obtain status information about the Gigaset WLAN Repeater 108 (see page 72).

You can call up the wizards, the Advanced Settings menu, and status information from any other configuration program screen at any time via the tabs on the upper edge of the user interface.

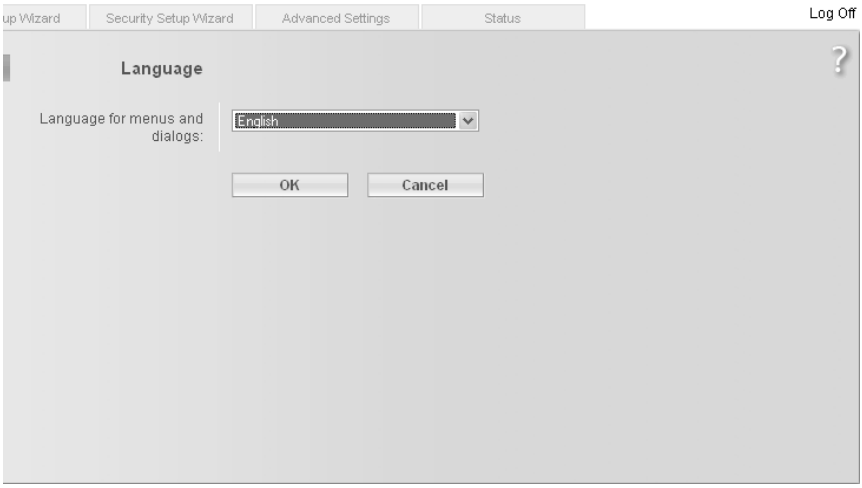
The configuration program offers you the following functions:

Basic Setup Wizard	These wizards allow you to set the date for your region, select the Operating Mode and configure – depending on the Operating Mode selected – your wireless and wired local network. This is described from page 21.
Security Setup Wizard	These wizards allow you to take precautions against unauthorised access to your Gigaset WLAN Repeater 108 and the local network. For example, you can change the password and set up encryption for wireless traffic. This is described from page 35. For the protection of your network we recommend that you carry out this setup.
Advanced Settings	Additional settings for changing the configuration of your wireless and wired network can be found in the Advanced Settings menu. You can also, for example, secure and restore your configuration data or restart the device. These configuration steps are optional and can be carried out at a later stage. This is described from page 45.

Selecting a language

The user interface can be presented in various languages.

➞ Click on ***Language***, top right above the start screen.



➞ If you wish to change the preset language, select the required language from the list.

➞ Click ***OK*** to apply the setting.

The device will be restarted to activate the change. Confirm the reboot in the dialogue field shown.

Once the procedure has been concluded the start screen is shown again.

Elements on the user interface

The user interface pages contain the following elements:

***Log Off* Button**

The ***Log Off*** button is always present on the right above the user interface. If you click on ***Log Off*** the session is terminated and the login screen appears again.

Help

Click on the question mark to display explanations about the current user interface screen.

Buttons and symbols used by the wizards

The wizards use graphic symbols to show which steps you have already carried out.

As soon as you have changed the configuration in a screen, click on ***Next >*** at the bottom of the screen. The ***< Back*** button returns you to the previous configuration step, and ***Cancel*** returns you to the start screen. In this case all changes will be lost. The entered data is not stored until you click on ***Finish*** when closing the wizard.

Buttons in the Advanced Settings menu

OK	Transfers the settings you have made to the Gigaset WLAN Repeater 108 configuration.
Cancel	Deletes all the entries in a screen since the last time you clicked on ***OK***.

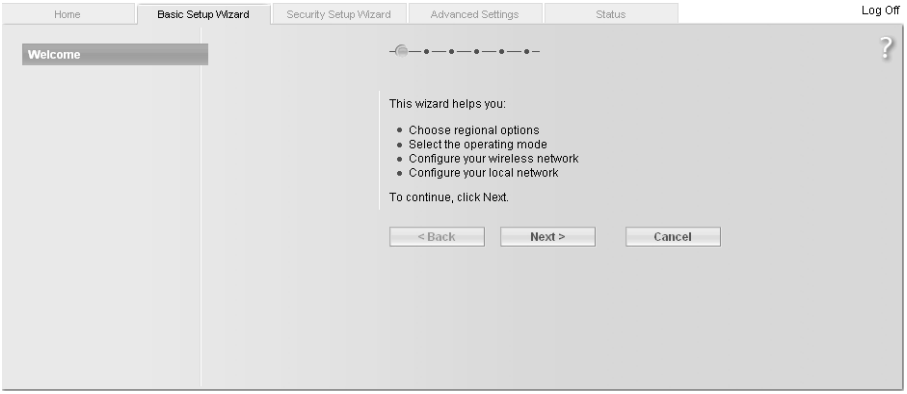
Other buttons may be visible depending on the function in question. These are described in the relevant sections.

Basic Setup Wizard

The Basic Setup Wizard guides you step by step through the general configuration of your Gigaset WLAN Repeater 108. This includes the following settings:

- regional settings
- Operating Mode selection
- wireless network (WLAN)settings
- local network (LAN)settings

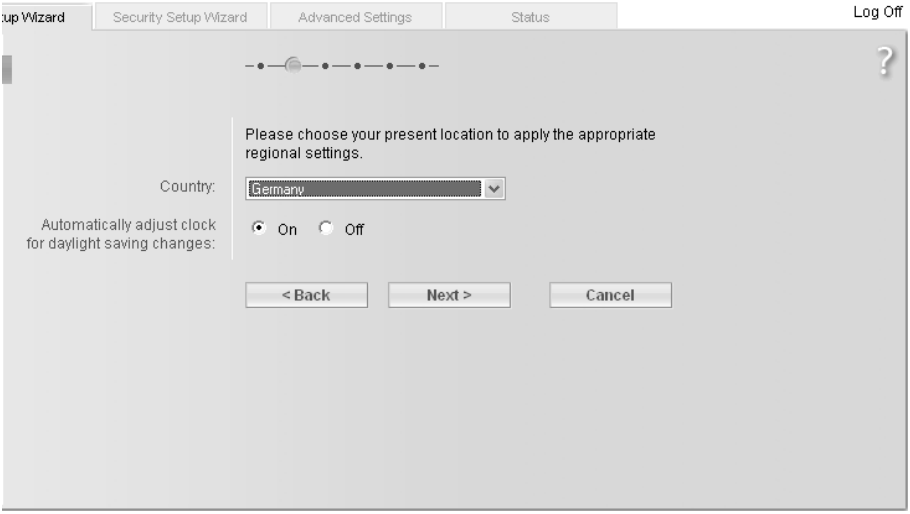
➞ Select ***Basic Setup Wizard*** on the start screen to start the configuration.



➞ Click the ***Next >*** button.

Regional Options

On this screen you can select your present location for the regional settings.



➞ Select the country where you are currently located from the list. You can set for the clock to change automatically to summer time and/or to the time zone as you wish.

➞ Select the required option and/or select the time zone for your location.

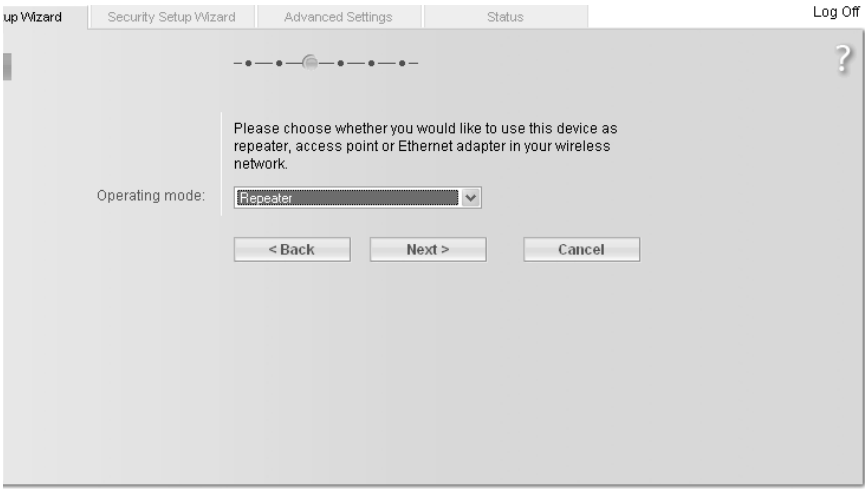
➞ Click the ***Next >*** button.

Operating Mode selection

You can operate the Gigaset WLAN Repeater 108 in the following modes:

- Repeater or access point (see page 24)
- Ethernet Adapter (see page 30)

In the factory setting, the Gigaset WLAN Repeater 108 is configured as a repeater. You can find more information about the operating modes in the chapter "Possible uses" on page 5.



➥ If you wish to change the default settings, select the desired Operating Mode from the selection menu.

➥ Click on ***Next >***.

The basic settings for the Repeater and access point operating modes are described in the next section, the basic settings for the Ethernet adapter Operating Mode can be found on page 30.

If you change the Operating Mode, you will be prompted to restart the device after completing the basic settings.

Please note:

The Gigaset WLAN Repeater 108 can be used as an access point. However, if it is configured as a repeater or Ethernet adapter and the term access point is used in this context in this user guide, a different device, such as a Router Gigaset SE551WLAN dsl/cable or another Gigaset WLAN Repeater 108 configured as an access point is intended.

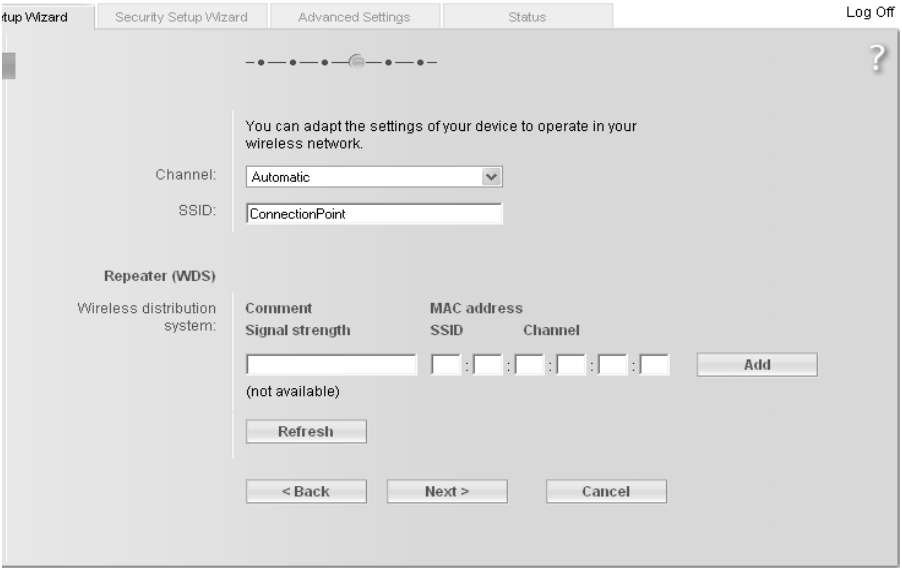
Basic settings for the Repeater and Access point Operating Mode

Settings for the wireless network

Your Gigaset WLAN Repeater 108 allows you to roam your network. Roaming provides optimum connection quality and uninterrupted data traffic while you move around within the range of your network. Your PC automatically sets up a connection to the access point with the strongest signal without interrupting data traffic. The precondition for roaming is setting the same radio channel, the same SSID and the same IP subnet on all the network components.

Please note:

The network adapter of the PC you want to use to configure your Gigaset WLAN Repeater 108 should be set to obtain its IP address automatically (see also page 93). If you use static IP addresses in your network, the IP address of your PCs must be in the same subnet as the IP address of your Gigaset WLAN Repeater 108 (see page 100).



The screenshot shows the setting options for Repeater operating mode; in access point operating mode, only Channel and SSID are displayed.

Channel

➔ In Repeater Operating Mode you must set the channel of the access point for which you wish to increase the range with the repeater.

➔ In Access point Operating Mode select the ***Automatic*** option.

Note:
If the basic settings for the channel are not displayed on this screen, Super G is preset as the transmission mode for the device (see chapter "Settings for the wireless network" on page 24). In this case, the channel is set automatically.

SSID

The SSID (Service Set Identifier) defines your wireless network.

Please remember that using the same SSID for several access points and repeaters means that you cannot influence which access point your PC will use to set up a connection. This may cause problems if you wish to connect to a particular device for configuration, and it has not been properly integrated into the rest of the network. You may not be able to reach it as your PC automatically sets up a connection with the strongest access point. In this case, move to the immediate vicinity of the device you want to connect to, or connect your PC directly to the device in question by means of an Ethernet cable.

➔ If you want to use roaming, enter the same SSID as the one used by the access point you select.

In Access point operating mode, enter the SSID that you wish to use for your wireless network.

Make a note of this SSID, you also need to enter it into the network adaptors of the PCs of your wireless network.

Repeater (WDS) (is only displayed in repeater Operating Mode)

You can enter access points for which you wish to extend the range of the wireless network. If a connection to the access point exists, the ***Signal strength***, the ***SSID*** and the ***Channel*** are displayed. If you wish to use the repeater, the WDS function must be activated on the access point. To do this, please refer to your access point's user guide.

➔ Enter the ***MAC address*** of the access point or select an access point from the list of available access points by clicking on ***Add***.

The MAC address of an access point in the Gigaset product range is shown on the nameplate on the underside of the unit.

➔ Enter a name for the access point in the ***Description*** field. This name will assist you to identify the various devices more easily. The SSID is the default setting.

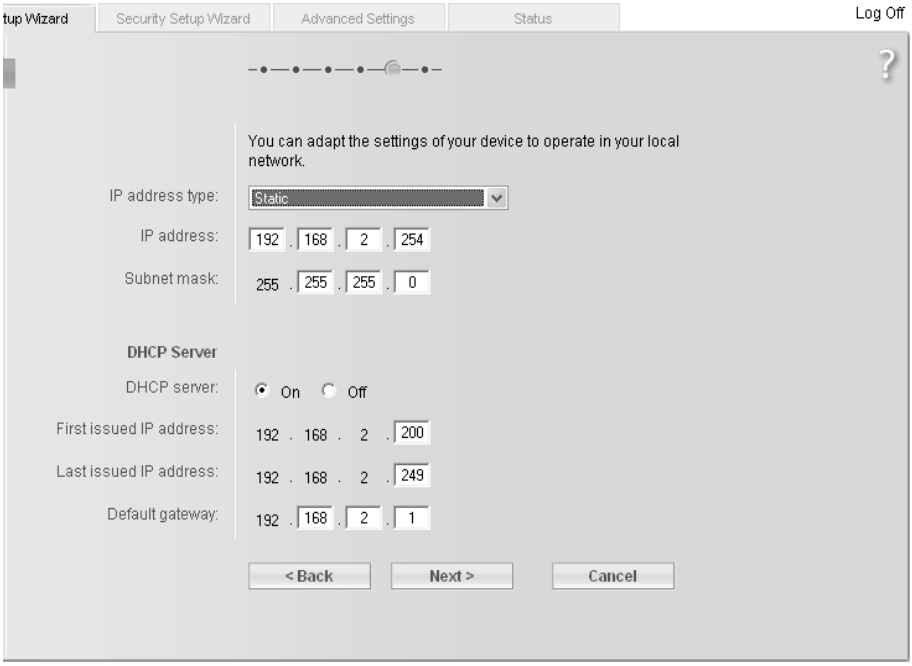
➔ Click on ***Refresh*** to update the display.

➔ Click on ***Next >***.

Note:
If carrying out the first configuration and if you have encrypted the data with one of the WPA standards, you can only select one access point. More than one access point is only possible with WEP encryption (page 38).

Local network settings

In the next step, you will see the screen for the basic settings of your local network.



➞ In ***IP address type***, specify whether the Gigaset WLAN Repeater 108 should obtain its IP address automatically from an external DHCP server in the network or not.

- If you want to use a static IP address for your Gigaset WLAN Repeater 108 (factory setting for the IP address is 192.168.2.254), select the ***Static*** option and enter the IP address and subnet mask in the fields underneath. Make sure that the IP address you assign complies with the conventions for private IP addresses described on page 100.
- Normally you do not have to change the option for the IP address type. However, if your Gigaset WLAN Repeater 108 shall obtain its IP address automatically from a DHCP server in your network, please select the ***Obtained automatically*** option.

Please note:

- If you choose the ***Obtained automatically*** option for your Gigaset WLAN Repeater 108, you may no longer be able to reach your configuration program as usual. The IP address you need to call up the program via your browser is assigned dynamically and can therefore change at any time. Therefore we advise you to assign a static IP address to the Gigaset WLAN Repeater 108. The ***Obtained automatically*** option should only be used in exceptional circumstances.
- You may be able to obtain information about the currently assigned IP address from the logbook of the DHCP server from which your Gigaset WLAN Repeater 108 obtains its IP address. To do this, you may need the MAC address of your Gigaset WLAN Repeater 108, which you can find on the label on the underside of the device. Then enter the IP address shown in the logbook in the browser's address line to launch the configuration program. If you still cannot open the configuration program using this method, you will have to reset your Gigaset WLAN Repeater 108 to the factory settings by using the reset button (see page 11). Your device will now have the old IP address 192.168.2.254 again and the DHCP server is activated.

If you have assigned a static IP address for your Gigaset WLAN Repeater 108, you can decide whether to use the Gigaset WLAN Repeater 108's integrated DHCP server.

Depending on the configuration of your network, it may be better to deactivate the Gigaset WLAN Repeater 108's integrated DHCP server.

➥ To do this, select the ***Off*** option for the ***DHCP server***.

However, this is only necessary, if

- another DHCP server is already being used in your network.
- you are using more than one Gigaset WLAN Repeater 108 in the same network. In this case, please switch off the DHCP server on all other repeaters. Make sure you change the IP addresses of the other Gigaset WLAN Repeater 108 (follow the example on page 28).
- the IP addresses in your network are static, i.e. you have manually assigned a static IP address to every network component.

Note:

If you opt for automatic address assignment for the connected PCs, make sure that the DHCP server of your existing access point has been activated. The devices connected via the Gigaset WLAN Repeater 108 will then use it automatically.

If your network does not have a DHCP server yet, then you can use the DHCP server integrated in your Gigaset WLAN Repeater 108 to assign the IP addresses of the connected devices automatically.

➞ In this case, select the ***On*** option for the ***DHCP server***.

➞ If you have activated the DHCP server integrated in your Gigaset WLAN Repeater 108, you should also check the following settings and make any changes that are necessary.

– The ***First issued IP address*** and ***Last issued IP address*** entries define the range of IP addresses that your Gigaset WLAN Repeater 108 should use to automatically assign IP addresses to PCs.

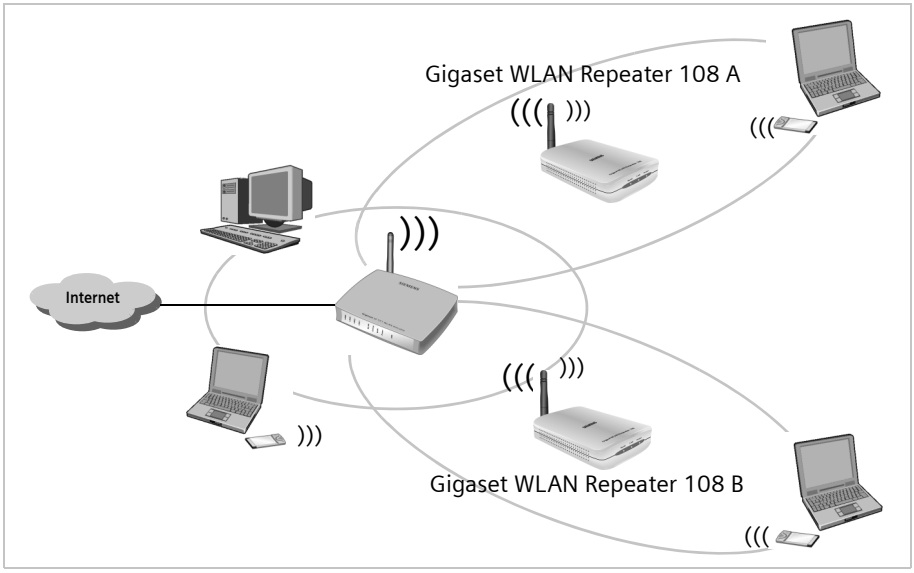
– In the ***Default gateway*** field, enter the IP address of your router that is to be used to connect your PCs to the Internet (e.g. 192.168.2.1).

Example of LAN settings with two repeaters

If you want to use several Gigaset WLAN Repeater 108 in the same network, make sure you assign different IP addresses to each of them. Use an address block that is within the selected subnet but not in the address block of the addresses automatically assigned by the DHCP server in your network. Switch off both associated DHCP servers.

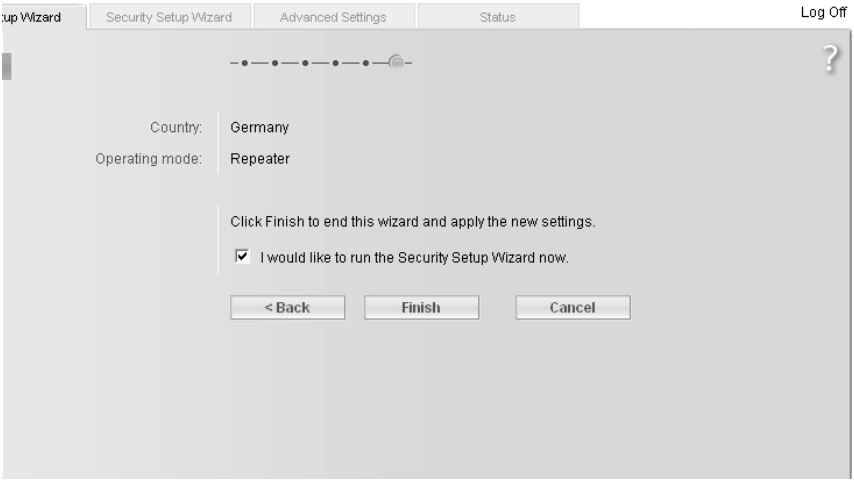
For two repeaters in the same network, you could, for example, assign

- the IP address 192.168.2.210 for Gigaset WLAN Repeater 108 A,
- the IP address 192.168.2.240 for Gigaset WLAN Repeater 108 B.



➞ Once you have completed the settings for your local network, click on ***Next >***.

This opens the screen for completing the basic settings.



You should now make the settings for network security.

➞ Click on ***Finish***. The basic settings you have made are saved.

➞ You are taken to the ***Security Setup Wizard***, which is described from page 35 onwards.

➞ If you want to make the security settings later, you can deactivate the relevant option and then click on ***Finish***.

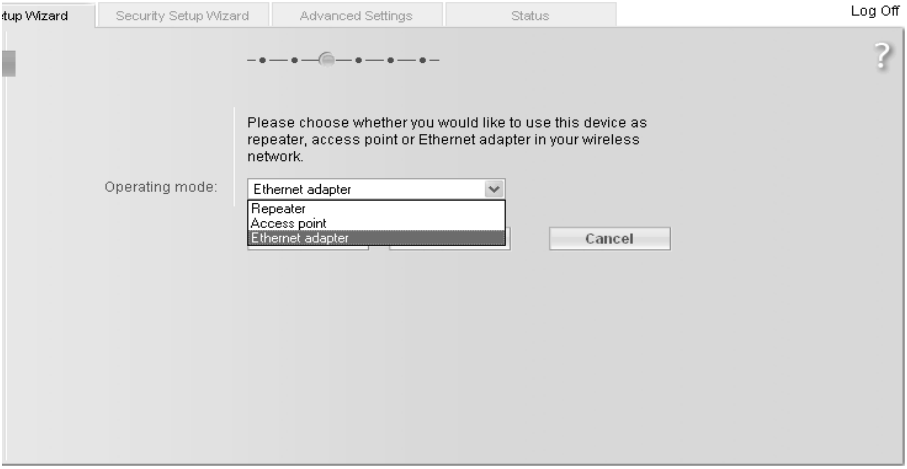
If you have changed the default settings, the device is restarted.

Basic settings in Ethernet adapter Operating Mode

In Ethernet adapter Operating Mode the Gigaset WLAN Repeater 108 works as a wireless network adaptor. It is connected directly to the Ethernet port of a computer, games console, a set-top box, or other network-enabled device.

➔ Before you make the basic and security settings for operating the Gigaset WLAN Repeater 108 as a network adapter, you should first cancel the configuration program and connect the device directly with the PC via an Ethernet cable.

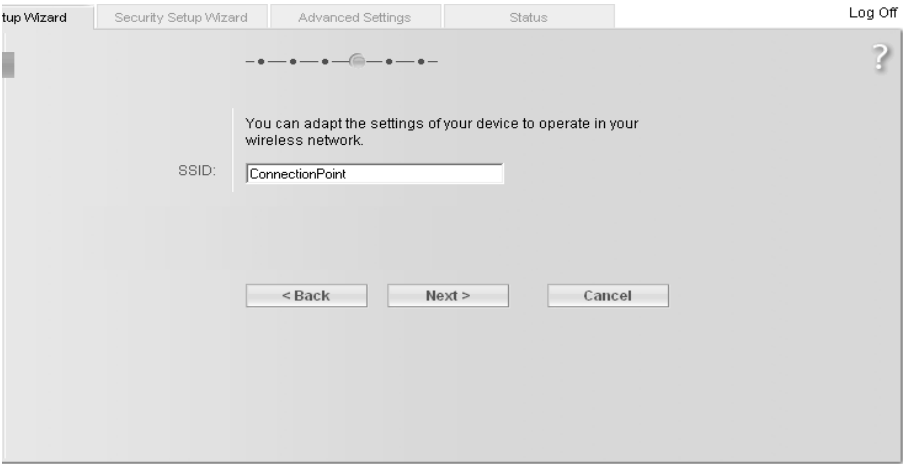
➔ Restart the browser, log back into the configuration program (see page 16) and in the ***Basic Setup Wizard*** go to the ***Operating Mode*** window.



➔ Click on the selection menu and select ***Ethernet adapter***.

➔ Click on ***Next >***.

Settings for the wireless network



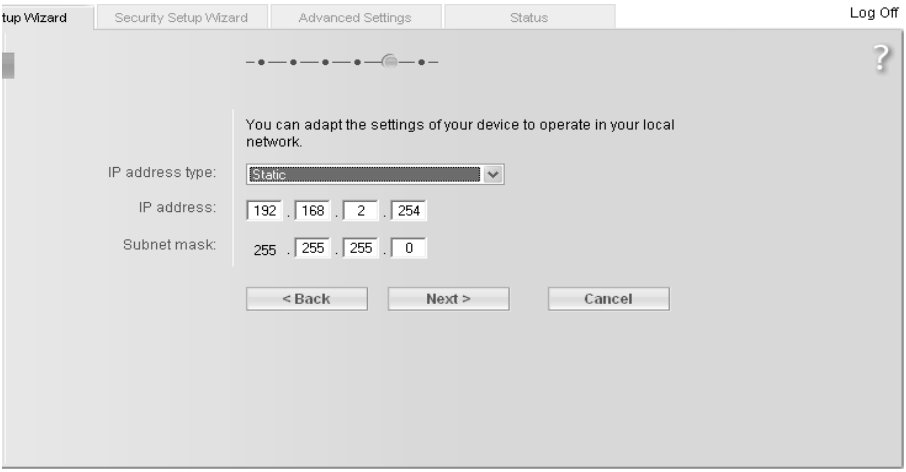
The SSID (Service Set Identifier) defines your wireless network. All wireless devices (router, PC etc.) in the same network must use the same SSID.

➥ Enter the same name for the ***SSID*** that you assigned to the network or the access point that you wish to connect to.

➥ Click on ***Next >***.

Local network settings

In the next step, you will see the screen for the basic settings of your local network.



➞ In ***IP address type***, specify whether the Gigaset WLAN Repeater 108 should obtain its IP address automatically from an external DHCP server in the network or not.

– If you want to use a static IP address for your Gigaset WLAN Repeater 108 (factory setting for the IP address is 192.168.2.254), select the ***Static*** option and enter the IP address and subnet mask in the fields underneath. Make sure that the IP address you assign complies with the conventions for private IP addresses described on page 100.

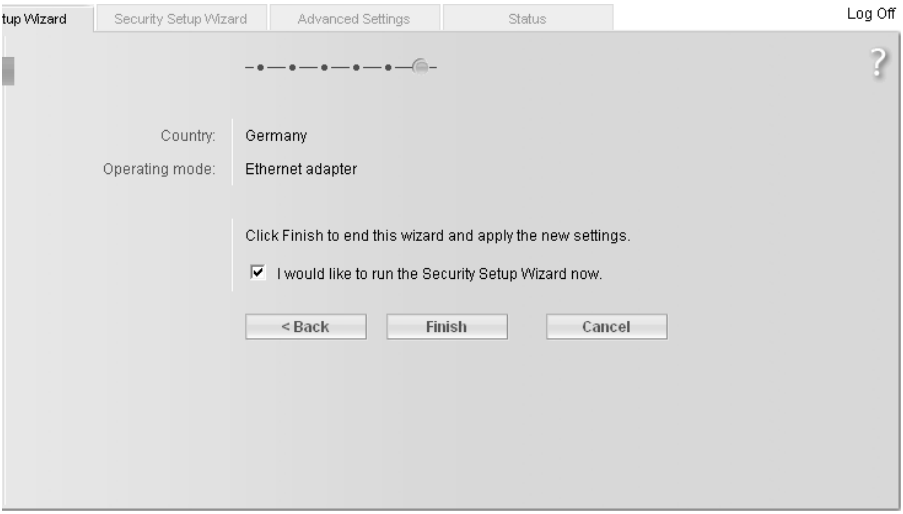
– Normally you do not have to change the option for the IP address type. If your Gigaset WLAN Repeater 108 shall obtain its IP address automatically from a DHCP server in your network, please select the ***Obtained automatically*** option.

Please note:

- We recommend using only one DHCP server in the network. If you are already using a DHCP server in your network, you should switch off the DCHP server on your Gigaset WLAN Repeater 108.
- You may be able to obtain information about the currently assigned IP address from the logbook of the DHCP server from which your Gigaset WLAN Repeater 108 obtains its IP address. To do this, you may need the MAC address of your Gigaset WLAN Repeater 108, which you can find on the label on the underside of the device. Then enter the IP address shown in the logbook in the browser's address line to launch the configuration program. If you still cannot open the configuration program using this method, you will have to reset your Gigaset WLAN Repeater 108 to the factory settings by using the reset button (see page 11). Your device will now have the old IP address 192.168.2.254 again and the DHCP server is activated.
- Make sure that you adjust the IP configuration of your Gigaset WLAN Repeater 108 as well as that of the connected devices (PC, games console etc.) to the configuration of the other participants in your networks or of your communication partner, for example a valid IP address (that differs from the already assigned addresses) and the appropriate subnet mask.

➡ Click on ***Next >***.

This opens the screen for completing the basic settings.



You should now make the settings for network security.

➞ Click on ***Finish***. The basic settings you have made are saved.

➞ This takes you to the ***Security Setup Wizard***, which is described from page 35 onwards.

➞ If you want to make the security settings later, you can deactivate the relevant option and then click on ***Finish***.

If you have changed the default settings the device is restarted.

Please note:

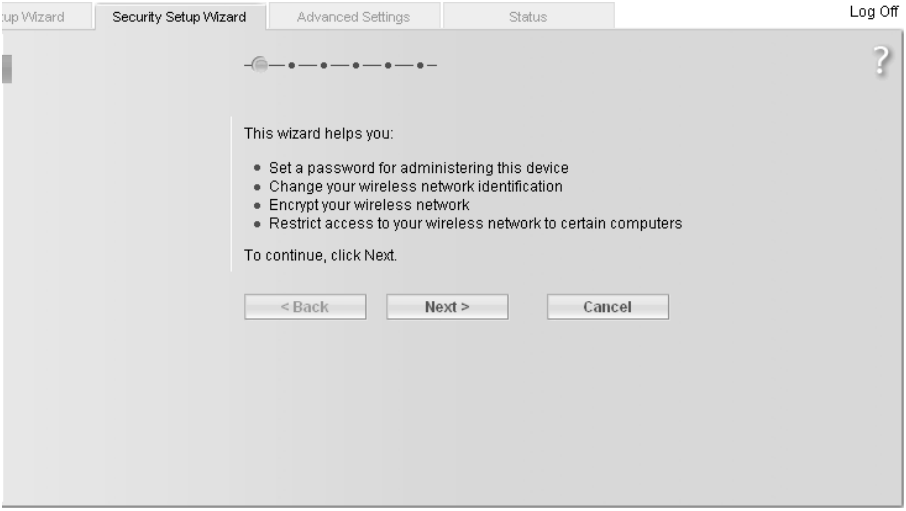
- If you wish to connect to an access point, on which the **encryption** of data is activated, after running the Basic Setup Wizard go straight to the Security Setup Wizard and enter the same data for encryption.
- If you do not immediately run the Security Setup Wizard for an access point with **encryption**, or if the keys or the type of encryption do not match, the PC cannot establish a connection to your Gigaset WLAN Repeater 108. This is because there is no accessible DHCP server, or the PC and repeater do not have static IP addresses. In this case, you must reset the Gigaset WLAN Repeater 108 to the factory settings (see section "Reset" on page 11) and run the Basic Setup Wizard again.
- The access point with which the Gigaset WLAN Repeater 108 is to communicate must be ready for use before the PC, games console or the set-top box to which the Gigaset WLAN Repeater 108 is to be connected is booted up.
- The appendix contains an example of basic settings for wireless connection of games consoles and set-top boxes (see page 80).

Security Setup Wizard

You can provide comprehensive protection for your Gigaset WLAN Repeater 108 and the connected PCs against unauthorised access within your local network and from outside from the Internet. The ***Security Setup Wizard*** offers the following functions:

- Changing the SSID of your wireless network (only for Repeater and access point operating modes, see page 37)
- Setting the encryption of your wireless network (see page 38)
- Restricting the access certain PCs have to your wireless network (only for Repeater and access point operating modes, see page 42)

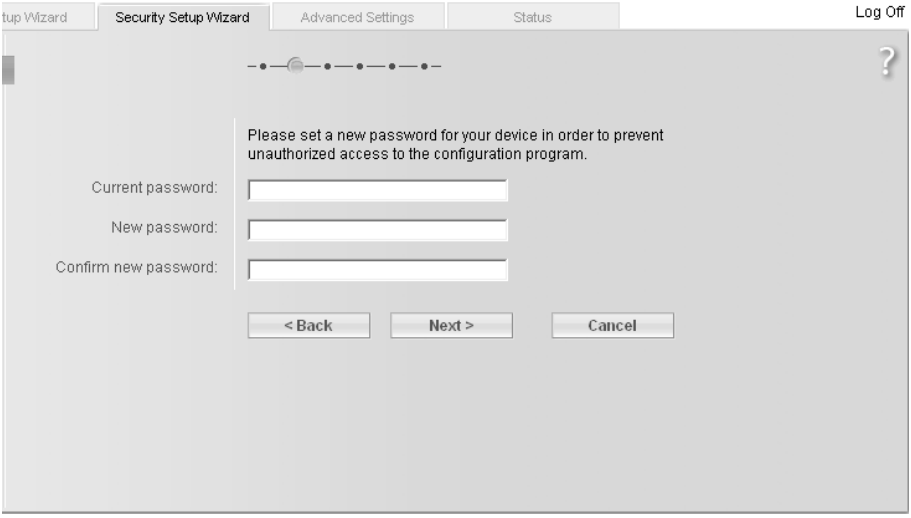
When you configure the Gigaset WLAN Repeater 108 for the first time, you should follow the Security Setup Wizard user interface step by step. You will find further options in the ***Advanced Settings*** menu (see page 47).



Now click on ***Next >***.

Changing the system password

The configuration of your Gigaset WLAN Repeater 108 is secured with the default password **admin**. To prevent unauthorised changes to the configuration, you should change the password.



➞ Enter the current password in the ***Current password*** field. The default password is **admin**.

Enter a new password in the ***New password*** field and repeat it in the field underneath. The password may contain up to 20 characters. The password is case sensitive. Avoid proper names and words that are too obvious. Use a combination of letters, numbers and special characters.

Please remember:

If you ever forget the password, you will have to reset your Gigaset WLAN Repeater 108 to the factory settings using the reset button (see page 11). Please bear in mind that this will restore all the settings to the factory configuration. The password is reset to the default setting **admin**.

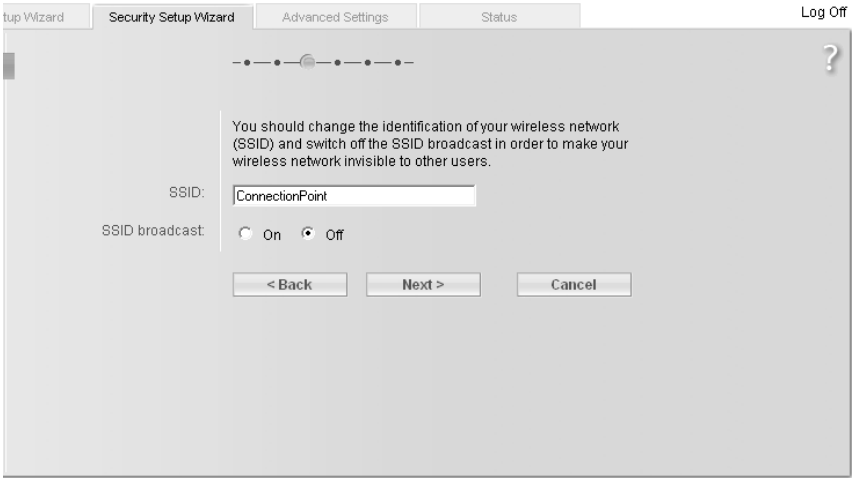
➞ Click on ***Next >***.

SSID

This screen only appears in Repeater or access point Operating Mode. In Ethernet adapter operating mode, the screen is displayed after the data encryption is set (see page 38).

Before the wireless network components can communicate with each other, you must use the same SSID (Service Set Identifier).

The default SSID for the Gigaset WLAN Repeater 108 is **ConnectionPoint**. For security reasons you should change this SSID and deactivate SSID broadcast.



SSID

➞ In Access point Operating Mode : enter a character string of your choice. The SSID is case sensitive. It can be up to 32 alphanumerical characters long.

➞ In Repeater and Ethernet adapter operating modes: enter the SSID of the network or access point to which you wish to connect the Gigaset WLAN Repeater 108.

Please note:

The connection to wireless Ethernet adapters that do not have valid SSIDs will be interrupted until the new SSID has been entered in them as well.

If the ***On*** option is activated for ***SSID broadcast***, the Gigaset WLAN Repeater 108 will send the SSID in all data transmissions, and the SSID will be displayed on PCs that have a wireless network adapter. In this case, unauthorised persons could use the SSID to gain access to your local network.

➞ Activate the ***Off*** option to enhance the security of your wireless network.

➞ Click on ***Next >*** to proceed to the next step.

Setting data encryption

In the next step you can set the encryption and authentication methods for your wireless network.

Wireless networks are even more strongly exposed to the risk of eavesdropping than wired networks.

The Gigaset WLAN Repeater 108 makes use of effective encryption methods to prevent unauthorised eavesdropping as far as possible.

You can use the following security mechanisms:

- WPA2-PSK or WPA2-PSK / WPA-PSK (see page 39)
- WEP encryption (Wired Equivalent Privacy, see page 40)

We recommend using WPA2-PSK if it is supported by all components in your wireless network.

You will find further options for setting data encryption and authentication in the Advanced Settings menu (see page 45).

- **Repeater Operating Mode and Ethernet adapter**

The encryption selection depends on the settings of your access point.

➥ Check what type of encryption and what keys are set at the access point and make the same settings in the Gigaset WLAN Repeater 108.

Note:
If you have selected several access points in repeater mode (page 25) when making the basic settings, only WEP is available for encryption.

- **Access point Operating Mode**

The encryption selection depends on which method is supported by all the components of your wireless network.

➥ Set the appropriate encryption of your data in the Gigaset WLAN Repeater 108, and then in the other components of your wireless network.

WPA2/WPA with pre-shared key (PSK)

WPA is a more advanced procedure than WEP for protecting wireless networks. Dynamic keys based on TKIP (Temporal Key Integration Protocol) offer increased security. The new standard WPA2 uses AES (Advanced Encryption Standard) for encryption.

WPA-PSK is a special WPA mode for users at home and in small companies without a company authentication server. Encryption keys are automatically generated with the pre-shared key, automatically changed ("rekeying") and authenticated between the devices after a certain period of time (Rekey Interval).

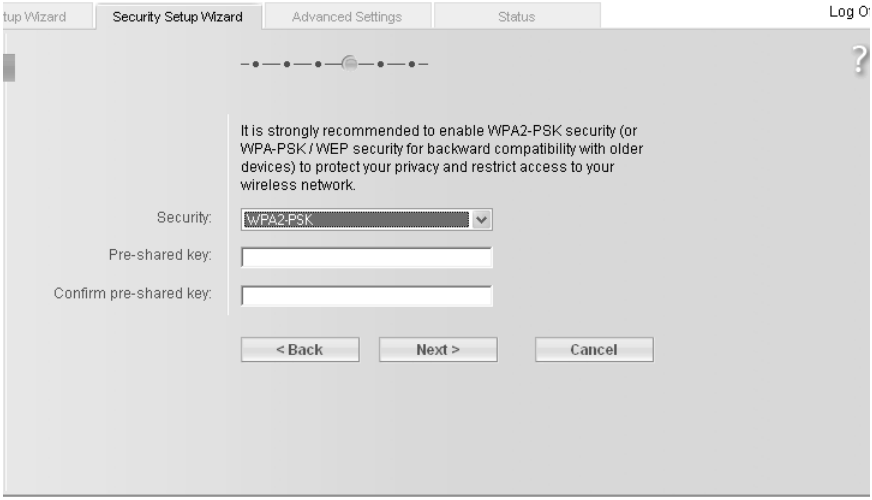
Please remember:

Every PC (network adapter) that requires access to a wireless network protected by WPA must also support WPA. To find out whether and how you can use WPA on your PC, read your network adapter's user guide.

➞ Select the option ***WPA2-PSK*** if it is supported by all components in your wireless network.

or

➞ Select the option ***WPA2-PSK / WPA-PSK*** if some or all components in your wireless network support WPA with the TKIP protocol.


tup Wizard
Security Setup Wizard
Advanced Settings
Status
Log O
It is strongly recommended to enable WPA2-PSK security (or WPA-PSK / WEP security for backward compatibility with older devices) to protect your privacy and restrict access to your wireless network.
Security:
WPA2-PSK
Pre-shared key:
Confirm pre-shared key:
< Back
Next >
Cancel

➞ Enter a key of your choice in the ***Pre-shared key*** field (min. 8 to max. 63 characters) and confirm it by repeating the entry.

You must also set the same pre-shared key for all wirelessly connected PCs.

➞ To go to the next step, click on ***Next >***.

WEP encryption

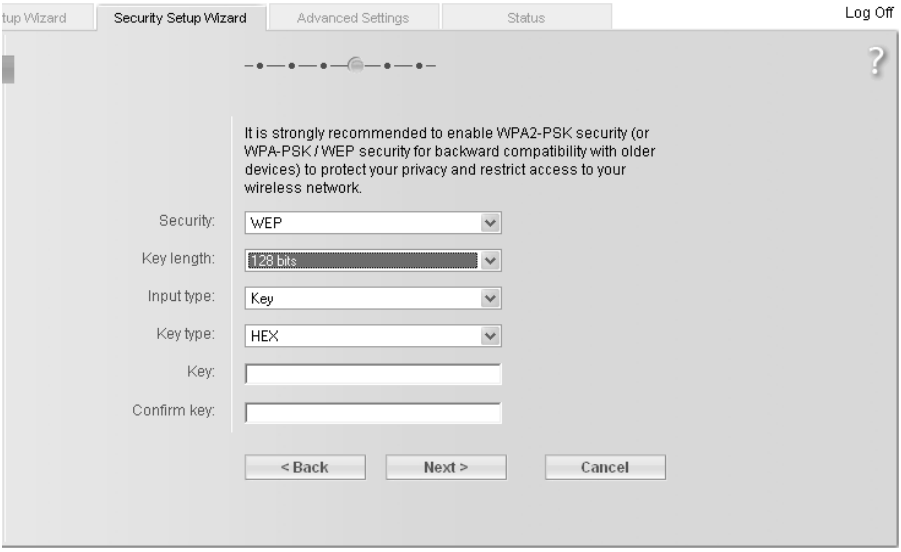
WEP (Wired Equivalent Privacy) is an encryption procedure for radio signals in wireless networks and meets the standard IEEE 802.11.

If you transmit data wirelessly and not all components in your wireless network support the higher security standard WPA (see page 39), we recommend that you activate WEP Encryption on these network components.

You can choose either the standard 64 bit key or the more robust 128 bit key for encryption. The keys are generated in hexadecimal or in ASCII format. You must use the same keys for encryption and decryption for the Gigaset WLAN Repeater 108 and all your wireless network adapters.

Please note:

If you have already set WEP encryption in your wireless network, you must set the same encryption data here.



➞ Select the ***Key length***: 64 bit or 128 bit.

➞ Select the ***Input type***, i.e. whether you wish to enter the key manually or have it generated automatically by means of a ***Passphrase***.

◆ **Manual key entry**

➞ Select the ***Key type***, ***Hex*** or ***ASCII***.

If you select ***Hex*** you can use the characters **0** to **9** and **A** to **F**.

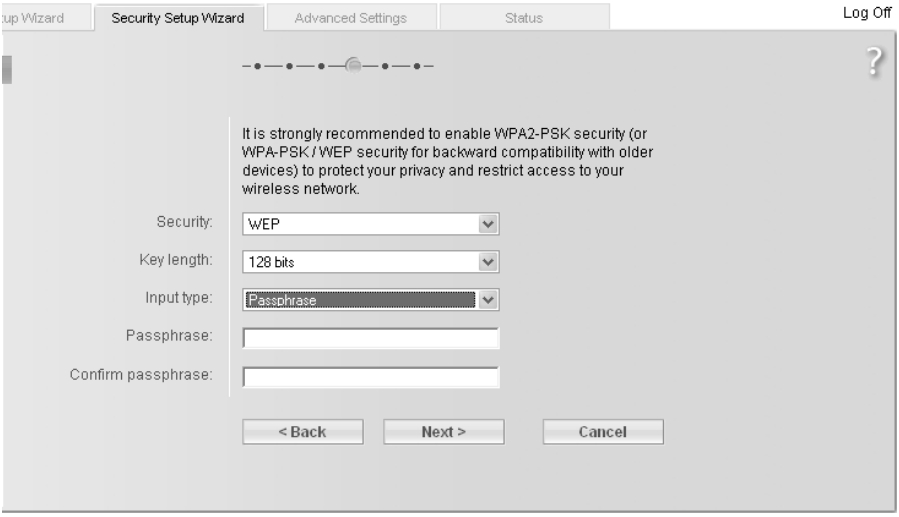
– With a 64 bit encryption depth the key is exactly 10 characters long.
An example of a valid key: 1234567ABC
– With a 128 bit encryption depth the key is exactly 26 characters long.
An example of a valid key: 234567ABC8912345DEF1234567

If you select ***ASCII*** you can use the characters **0** to **9**, **A** to **Z** and **a** to **z** plus the special characters in the ASCII character set.

– With a 64 bit encryption depth the key is exactly 5 characters long.
An example of a valid key: GIGA1
– With a 128 bit encryption depth the key is exactly 13 characters long.
An example of a valid key: GIGASET_SE551

➞ Confirm the key by entering it again in the ***Confirm key*** field.

◆ **Generating the key by means of a Passphrase**



➞ Enter a ***Passphrase*** (up to 32 characters) and confirm it by entering it again. The key is generated automatically.

Please note:

- If you have reset the encryption, it is very **important** that you make a note of the key or the passphrases. You will need this information to configure the wireless network adapters properly.
- When you have completed the Security Setup Wizard, you must also set the WEP encryption in other components of your wireless network.

➥ To go to the next step in the Security Setup Wizard, click on ***Next >***.

Access control within the wireless network

This screen only appears in Repeater or access point Operating Mode.

This step allows you to determine which PCs should have wireless access to the Gigaset WLAN Repeater 108. The access control is based on the MAC address of the PCs' network adapters. You can enter the MAC addresses for the PCs manually or select them from the list of PCs that are currently logged in.

Note:

The access control setting is only valid for wireless access of PCs to the repeater or access point. If you use a router in your wireless network and have configured access control there for PCs, you must also set this access control on the repeater.

The default setting for access control is disabled. This means that all PCs using the correct SSID and the correct encryption can log in.

➥ Next to ***MAC address filter*** select the option ***On*** to activate the MAC filtering.

Entering MAC addresses manually

➞ Enter the MAC address of the network adapter. You will find this address on the bottom of the device.

➞ Enter the name of the PC.

➞ Click on the ***Add*** button to add the entry to the list.

Selecting from the list of logged-in PCs

➞ Select the required PC from the ***Known wireless clients*** list. All PCs are displayed that are currently logged in to the router.

➞ Click on the ***Add*** button to add the selected PC to the list.

Please remember:

If you activate MAC access control, you must at least enter the PC from which you are configuring the Gigaset WLAN Repeater 108. Otherwise you will no longer be able to access the user interface and a corresponding error message will be shown.

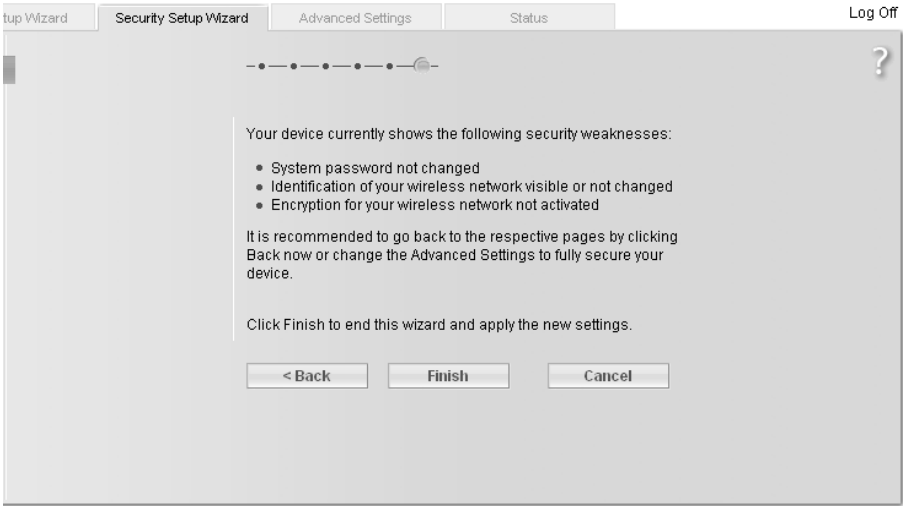
If, by mistake, you have denied all PCs access to the Gigaset WLAN Repeater 108 you have two choices:

- You can completely reset the Gigaset WLAN Repeater 108 (see page 11).
- You can connect a PC to the Gigaset WLAN Repeater 108 using one of the LAN connections (by cable). As MAC access control only applies to PCs that are connected "wirelessly", you can use this PC to change the configuration.

➞ To go to the next step, click on ***Next >***.

Saving settings

On the next screen you conclude the wizard and save the settings. You will be informed of any security risks that still exist.


tup Wizard
Security Setup Wizard
Advanced Settings
Status
Log Off
Your device currently shows the following security weaknesses:
System password not changed
Identification of your wireless network visible or not changed
Encryption for your wireless network not activated
It is recommended to go back to the respective pages by clicking Back now or change the Advanced Settings to fully secure your device.
Click Finish to end this wizard and apply the new settings.
< Back
Finish
Cancel

➞ Click on ***Finish*** to close the wizard and to save the settings.

If you have changed the default settings, the device is restarted.

Please remember:

- If you have activated encryption, the wireless connection will be blocked until you enter the appropriate key in the other devices on the network. Please consult the operating instructions for the network adapter.
- If you use the Gigaset WLAN Repeater 108 in Repeater or Ethernet adapter Operating Mode, the set keys must match those in the access point. If an error is made, you no longer have access to the wireless network. If you do not immediately run the Security Setup Wizard settings for an access point with **encryption** or the keys or the encryption type do not match, the PC cannot connect to the Gigaset WLAN Repeater 108. This is because there is then no accessible DHCP server or PC and repeater have no static IP addresses. In this case, you must return the Gigaset WLAN Repeater 108 to the factory settings (see section "Reset" on page 11) and run the Basic Setup Wizard again.

Configuring the Advanced Settings

In the ***Advanced Settings*** menu, you can configure all the options for the Gigaset WLAN Repeater 108. If you wish, you can also make changes to the settings you made using the wizards. The following table shows the menu options.

Menu	Description
Operating Mode	Here you can change the Operating Mode of your device (page 46).
Local Network	You can configure the settings for your local network (page 47).
Wireless Network	You can configure the wireless network and protect your device and network against eavesdropping (see page 51).
Administration	In this menu, you can make or edit various system settings, e.g. change the password (see page 66) or set the region and time (see page 64). You can restart the device (see page 68) and update the firmware (see page 69).

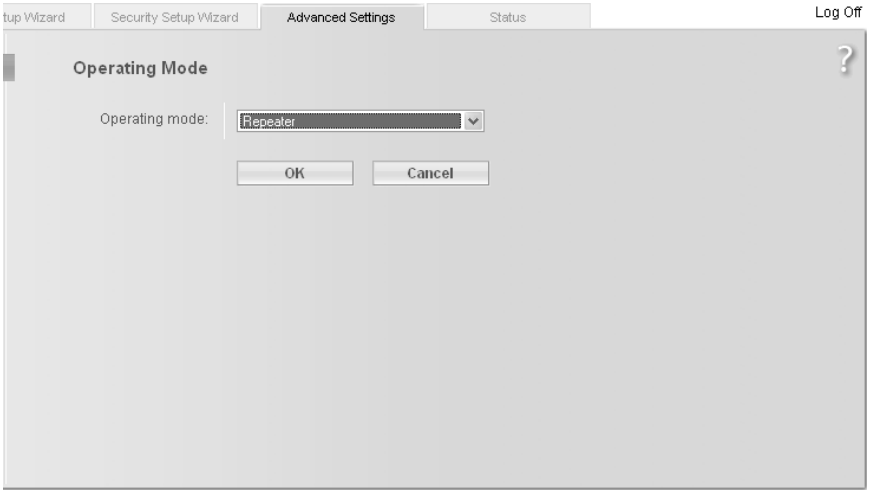
Operating Mode

You can operate the Gigaset WLAN Repeater 108 in the following operating modes:

- Repeater
- Access point
- Ethernet adapter

In the factory setting, the Gigaset WLAN Repeater 108 is configured as a repeater. You can find more information about the operating modes in the section on "Possible uses" on page 5.

➞ On the ***Advanced Settings*** page, select ***Operating Mode***.



➞ From the selection menu, choose the Operating Mode you want to use.

➞ Click on ***OK***.

You are now prompted to confirm the restarting of the device. Restarting can take up to two minutes.

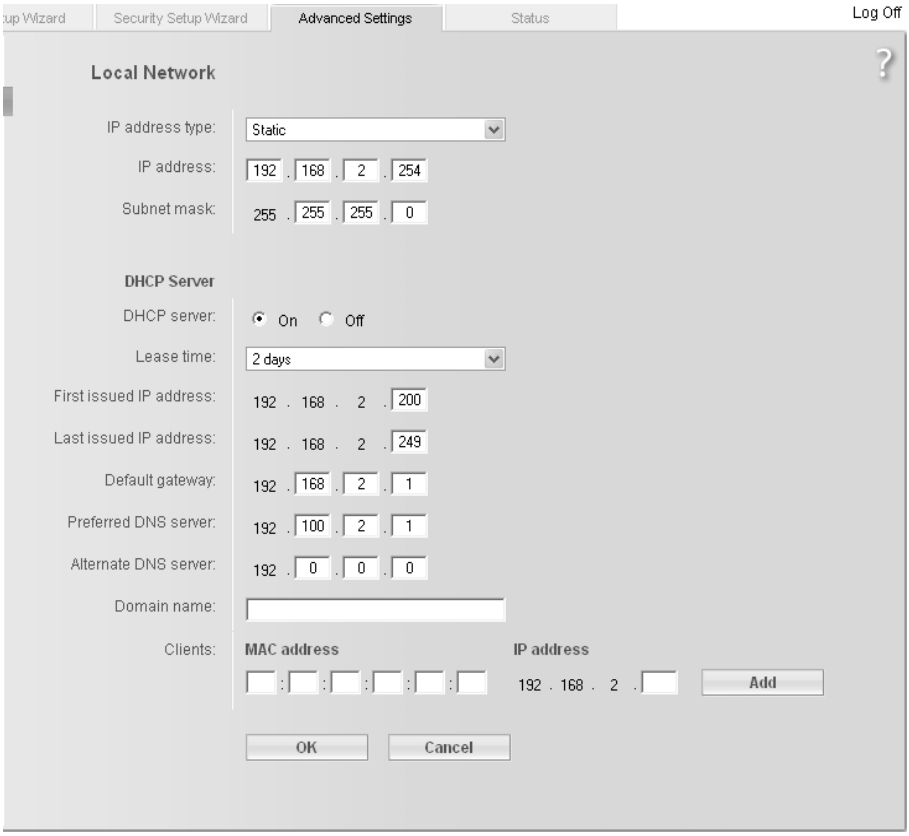
Local Network

In the ***Local Network*** menu, you can determine the settings for assigning IP addresses.

➞ Select ***Advanced Settings*** – ***Local Network***.

The configuration options for Repeater and Access point operating modes (see below) differ from those for the Ethernet adapter operating mode (see page 50).

Repeater/Access Point



➥ In ***IP address type***, specify whether the Gigaset WLAN Repeater 108 should obtain its IP address automatically from an external DHCP server in the network or not.

– If you want to use a static IP address for your Gigaset WLAN Repeater 108 (factory setting for the IP address is 192.168.2.254), select the ***Static*** option and enter the IP address and subnet mask in the fields underneath. Make sure that the IP address you assign complies with the conventions for private IP addresses described on page 100.

  If you want to use several Gigaset WLAN Repeater 108 in the same network, make sure you assign different IP addresses to each of them. Use an address block that is within the selected subnet but not in the address block of the addresses automatically assigned by the DHCP server in your network. See also "Example of LAN settings with two repeaters" on page 28.

– Normally you do not have to change the option for the IP address type. However, if your Gigaset WLAN Repeater 108 should obtain its IP address automatically from a DHCP server in your network, please select the ***Obtained automatically*** option.

Please note:

You may be able to obtain information about the currently assigned IP address from the logbook of the DHCP server from which your Gigaset WLAN Repeater 108 obtains its IP address. To do this, you may need the MAC address of your Gigaset WLAN Repeater 108, which you can find on the label on the underside of the device. Then enter the IP address shown in the logbook in the browser's address line to launch the configuration program. If you still cannot open the configuration program using this method, you will have to reset your Gigaset WLAN Repeater 108 to the factory settings by using the reset button (see page 11). Your device will now have the old IP address 192.168.2.254 again and the DHCP server is activated.

If you have assigned a static IP address for your Gigaset WLAN Repeater 108, you can decide whether to use the Gigaset WLAN Repeater 108's integrated DHCP server.

Depending on the configuration of your network, it may be better to deactivate the Gigaset WLAN Repeater 108's integrated DHCP server.

➥ To do this, select ***Off*** for the ***DHCP Server***.

However, this is only necessary, if

– another DHCP server is already being used in your network,

– you are using more than one Gigaset WLAN Repeater 108 in the same network. In this case, please switch off the DHCP server on all other repeaters. Make sure you change the IP addresses of the other Gigaset WLAN Repeater 108 (follow the example on page 28),

– the IP addresses in your network are static, i.e. you have manually assigned a static IP address to every network component.

➞ To do this, select ***Off*** for the ***DHCP Server***.

Please note:

- If you use your Gigaset WLAN Repeater 108 in Repeater Operating Mode and opt for automatic address assignment for the connected PCs, make sure that the DHCP server of your access point has been activated. The devices connected via the Gigaset WLAN Repeater 108 will then use it automatically.
- If you use your Gigaset WLAN Repeater 108 in Access point Operating Mode, it also depends on your existing network whether or not you should use the integrated DHCP server of the Gigaset WLAN Repeater 108. If there is already a DHCP server, in your network, this one should be used.

If your network does not have a DHCP server yet, then you can use the DHCP server integrated in your Gigaset WLAN Repeater 108 to assign the IP addresses of the connected devices automatically.

➞ In this case, select ***On*** for the ***DHCP Server***.

If you have activated the DHCP server integrated in your Gigaset WLAN Repeater 108, you should also check the following settings and make any changes that are necessary.

➞ In the ***Lease time*** field, specify how long the PCs should retain their assigned IP addresses before they are changed.

➞ The ***First issued IP address*** and ***Last issued IP address*** values define the range of IP addresses that your Gigaset WLAN Repeater 108 should use to automatically assign IP addresses to PCs.

Please note:

The address block you enter must not overlap with those of other DHCP servers in your network or the static IP addresses of devices connected to your network. This could otherwise cause IP addresses to conflict. This can impair or block the accessibility of some or all of the devices in your network.

➞ In the ***Default gateway***, ***Preferred DNS server*** and ***Alternate DNS server*** fields, enter the data required for connecting to the Internet. As a rule, you can enter the IP address of the router in your network for ***Default gateway*** and ***Preferred DNS server***, which sets up the connection to the Internet for all the PCs in the network. Entries in the ***Alternate DNS server*** field are generally optional. For additional information, please turn to the appropriate chapter in the operating instructions for your router.

➞ In the ***Domain name*** field, you can specify a domain name in the local network.

Please note:
If you use the Gigaset WLAN Repeater 108 in Access point Operating Mode and the integrated DHCP server has been activated, configure the network settings for the connected PCs so that the ***Obtain an IP address automatically*** option is activated. For more information about this please turn to "Assigning IP addresses automatically" on page 93. If you deactivate the Gigaset WLAN Repeater 108's DHCP server, you will have to assign a static IP address for the PCs via the network settings unless there is another DHCP server on the network. This is described on page 100.

You can specify static IP addresses for individual PCs which are then assigned by the DHCP server.

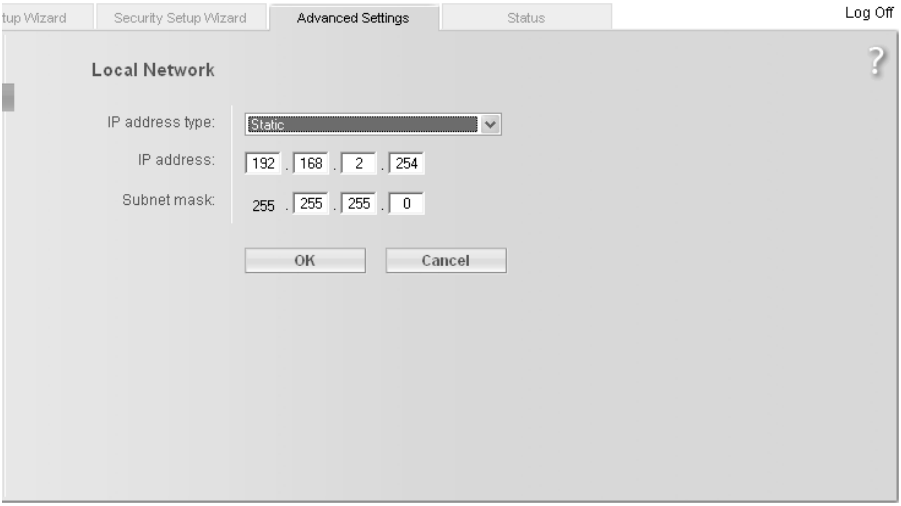
➞ Enter the ***MAC address*** of the PC and the required ***IP address*** in the relevant fields.

➞ Click on ***Add***.

➞ Click on ***OK*** to apply the settings.

➞ You should restart all the devices once all the configuration settings have been made.

Ethernet adapter Operating Mode



➞ In ***IP address type***, specify whether the Gigaset WLAN Repeater 108 should obtain its IP address automatically from an external DHCP server in the network or not.

– If you want to use a static IP address for your Gigaset WLAN Repeater 108 (factory setting for the IP address is 192.168.2.254), select the ***Static*** option and enter the IP address and subnet mask in the fields underneath. Make sure that the IP address you assign complies with the conventions for private IP addresses described on page 100.

– Normally you do not have to change the option for the IP address type. If your Gigaset WLAN Repeater 108 should obtain its IP address automatically from a DHCP server in your existing network, please select ***Obtained automatically***.

➡ Click ***OK*** to apply the settings.

Please note:

- We recommend using only one DHCP server in the network. If you are already using a DHCP server in your network, you should switch off the DCHP server on your Gigaset WLAN Repeater 108.
- You may be able to obtain information about the currently assigned IP address from the logbook of the DHCP server from which your Gigaset WLAN Repeater 108 obtains its IP address. To do this, you may need the MAC address of your Gigaset WLAN Repeater 108, which you can find on the label on the underside of the device. Then enter the IP address shown in the logbook in the browser's address line to launch the configuration program. If you still cannot open the configuration program using this method, you will have to reset your Gigaset WLAN Repeater 108 to the factory settings by using the reset button (see page 11). Your device will now have the old IP address 192.168.2.254 again and the DHCP server is activated.
- Make sure that you adjust the IP configuration of your Gigaset WLAN Repeater 108 as well as that of the connected devices (PC, games console etc.) to the configuration of the other participants in your network or of your communication partner, for example a valid IP address (that differs from the addresses already assigned) and the appropriate subnet mask.

Wireless Network

If PCs are communicating wirelessly via the Gigaset WLAN Repeater 108, you should also take steps to enhance the security of your wireless network.

➡ In the ***Advanced Settings*** menu, select ***Wireless Network***.

The Gigaset WLAN Repeater 108 wireless network is preset as active. Your device can only communicate with your wireless network if this default setting is left as it is. If you do not want to use this function, you can deactivate the ***Wireless Network*** option.

In this menu you can

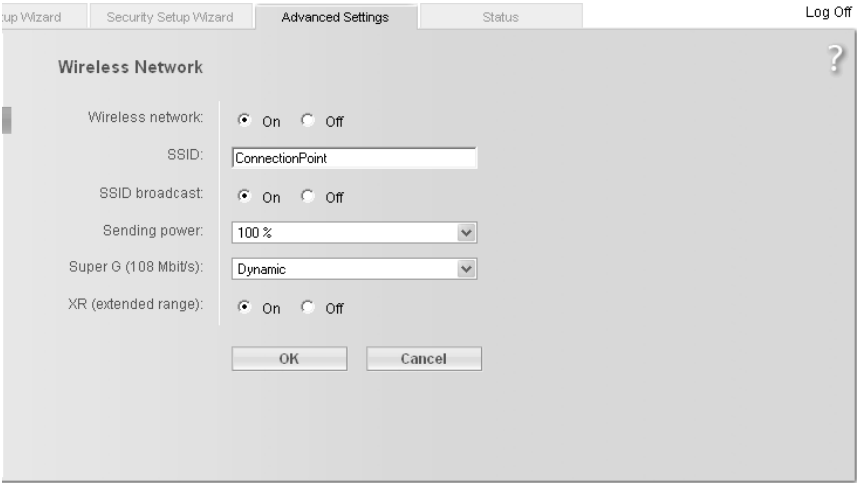
- set the channel and SSID (see page 52),
- set the transmission mode and transmission power (see page 53),
- set the Encryption for wireless traffic (see page 55),

In ***Repeater*** or ***Access point*** Operating Mode you can also

- limit access to the wireless network (see page 61),

In ***Repeater*** Operating Mode you can also

- configure the repeater function (see page 63).



Channel

This function is only shown in the window if the Super G transmission mode is deactivated (see page 54).

The set radio channel is used by all clients in your network for wireless data transfer. You can choose between various channels, depending on your current location.

➞ In the Repeater operating mode, set the channel that uses the access point for which you wish to increase the range.

➞ Select ***Automatic*** in the Access point operating mode so that the best channel for transmitting the data is used automatically.

SSID

Before the wireless network components can communicate with each other, you must use the same SSID (Service Set Identifier).

The Gigaset WLAN Repeater 108 SSID factory setting is **ConnectionPoint**. For the repeater, you must enter the SSID of the access point for which the range should be increased. For security reasons you should deactivate ***SSID broadcast*** (see below).

➞ Enter the required SSID. The SSID is case sensitive. It can be up to 32 alphanumerical characters long.

Please note:

The connection to the wireless network adapters will be interrupted until you enter the new SSID on them as well.

***SSID broadcast* (only Repeater and Access Point Operating Mode)**

If this option is enabled (default setting), the Gigaset WLAN Repeater 108 will send the SSID in all data transmissions, and your Gigaset WLAN Repeater 108's SSID will be displayed on PCs that have a wireless network adapter. In this case eavesdroppers could use the SSID to gain access to your network.

If you deactivate ***SSID broadcast***, your Gigaset WLAN Repeater 108's SSID will not be displayed. This increases the protection against unauthorised access to your wireless network. However, you must make a note of the SSID. You will need this to log on to your PC.

➞ Select the ***Off*** option to deactivate ***SSID broadcast***.

Transmission mode

This function is only shown in the window if the Super G transmission mode is deactivated (see page 54).

The standard IEEE 802.11g permits data transfer up to 54 Mbit/s, IEEE 802.11b up to 11 Mbit/s. For the best possible data transfer rates in your network select ***IEEE 802.11g only***. To operate clients with older wireless network adapters in your network, select ***IEEE 802.11b/g (mixed)***.

➞ Select the required transmission mode for your wireless network.

Sending power

➞ Select the required sending power for your device.
We recommend that you select a transmission power with a range to suit the spatial environment of your local network. A much greater range makes it easier to eavesdrop on your wireless data transmission.

Super G (only Repeater and Access Point Operating Mode)

With the aid of channel bundling, the Super G transmission mode enables wireless data transfer up to 108 Mbps. The channel for wireless data transfer is statically set. You can only use Super G if this function is supported by at least one client in your wireless network. For the best possible data transfer rates, all clients in your LAN should support Super G.

Please note:

If you activate Super G as the transmission mode but it is not supported by all components in your wireless network, for technical reasons, the transmission rate in the network may be significantly lower than the possible maximum of 108 Mbit/s.

➞ Select the mode for using ***Super G (108 Mbit/s)*** for your wireless network to increase the speed of data transfer. You can choose between two modes.

- ***Static***: Wireless transmission is at a rate of just 108 Mbps. Clients that do not support this speed cannot connect to the access point.
- ***Dynamic*** (default setting): if you select this transmission mode, the router accepts participants who communicate at different transfer rates and adjusts to the slowest client in the network.

➞ If you do not wish to use ***Super G (108 Mbit/s)***, please select ***Disabled*** from the selection menu.

XR (extended range, only Repeater and Access Point Operating Mode)

Activating XR enables wireless data transfer even in the peripheral areas of your wireless network, albeit at very low data transfer rates. Conversion to XR mode occurs automatically when the signal is weak enough and if the partner station is also XR capable.

➞ Activate or deactivate XR for your wireless network.

➞ Click on ***OK*** to apply the settings.

Setting wireless security

To protect your wireless local network against eavesdropping and unauthorised access to your data, you should set the data encryption.

◆ **Repeater and Ethernet adapter Operating Mode**

The encryption selection that is available will depend on your access point.

➞ Check what type of encryption and which keys are set at the access point, and make the corresponding settings in the Gigaset WLAN Repeater 108.

Note:
If you have selected several access points in repeater mode (see page 25 and see page 63), only WEP is available for encryption.

◆ **Operating Mode Access point**

The encryption selection depends on which methods are supported by all your wireless network components.

➞ Set the corresponding encryption of your data on the Gigaset WLAN Repeater 108 and then on the other components of your wireless network.

You can use the following security mechanisms:

- WPA2-PSK and WPA2-PSK / WPA-PSK (see page 56)
- WAP2 and WPA2 / WPA with authentication server (only in Access point mode, see page 57)
- WEP encryption (Wired Equivalent Privacy), (see page 58)

We recommend using WPA2-PSK if it is supported by all components in your wireless network.

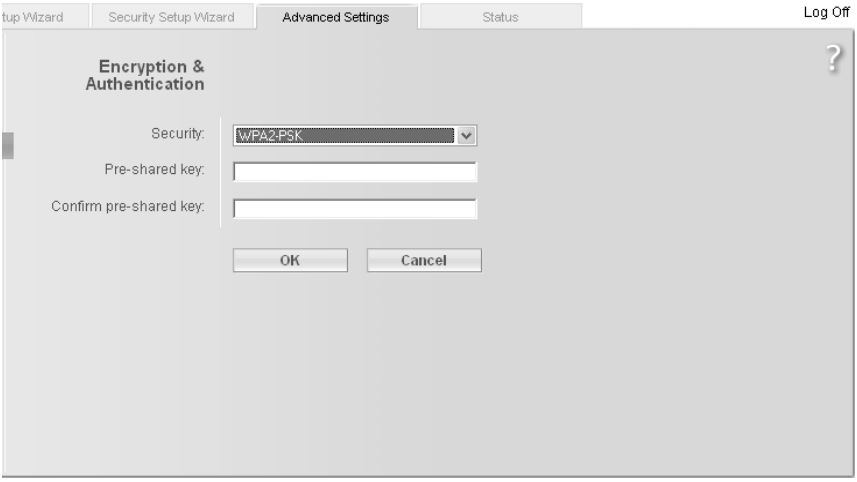
WPA2-PSK and WPA2-PSK / WPA-PSK

WPA / WPA2 with Pre-shared Key (WPA-PSK, WPA2-PSK)

WPA-PSK is a special WPA mode that provides encryption protection for users at home and in small companies without a company authentication server. Encryption keys are automatically generated with the Pre-shared Key, and automatically changed (rekeying) and authenticated between the devices after a certain period of time (Rekey Interval).

Which standard of encryption you can choose depends on the components in your wireless network. Every PC (network adapter) that requires access to a wireless network protected by WPA must also support WPA. To find out whether and how you can use WPA on your PC, read your network adapter's user guide. If all components support WPA2, select option ***WPA2-PSK***. If you are using network adapters that only support WPA, select the option ***WPA2-PSK / WPA-PSK***. The entries described below are the same for both options.

➞ Select the required option in the ***Security*** field.



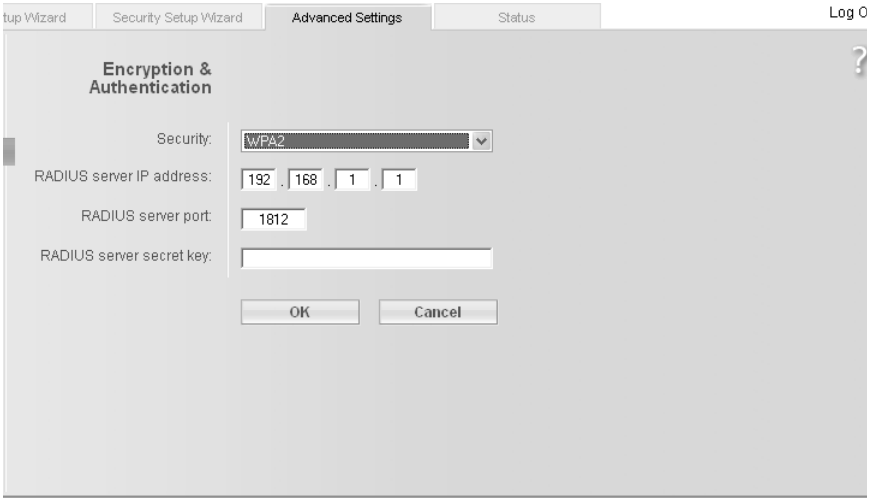
➞ Enter a key in the ***Pre-shared key*** field (min. 8 to max. 63 characters) and confirm it by entering it again.

➞ Apply the settings by clicking ***OK***.

WPA and WPA2 with authentication server (Access point Operating mode only)

In large networks (e.g. in companies) WPA enables the use of an additional authentication service. In this case, user access is controlled by user accounts and passwords, in addition to WPA encryption. A RADIUS server acts as an authentication server. You can select the new standard ***WPA2***, if this is supported by all components in your wireless network, or select ***WPA2 / WPA***, if you are using devices that only support WPA.

➞ Select the required option in the ***Security*** field.



➞ Enter the IP address of the RADIUS server in the ***RADIUS server IP address*** field.

➞ Enter the port of the RADIUS server in the ***RADIUS server port*** field.

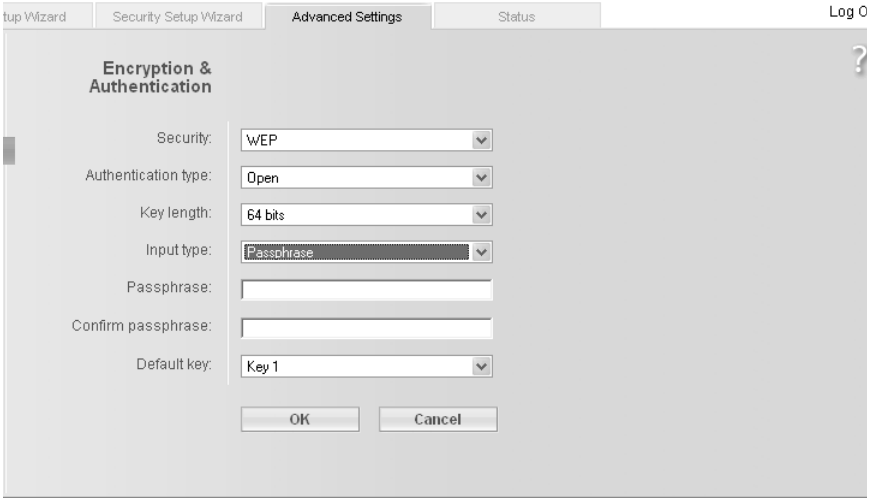
➞ In the ***RADIUS server secret key*** field, enter a key conforming to the conventions of the RADIUS server, which is to be used by the server for authentication.

➞ Click on ***OK*** to apply the settings.

WEP encryption

If WPA is not supported by all components in your wireless network, we advise you to activate WEP Encryption on your wireless network components.

➡ In the ***Security*** field, select the option ***WEP***.



➡ Select the ***Authentication type***:

- Select ***Shared*** to require that each client registers on the network with a specified key.
- Select ***Open*** to permit data transfer within your wireless network without the need for a key.

You can choose either the standard 64 bit key or the more robust 128 bit key for encryption. The keys are generated in hexadecimal or in ASCII format. You must use the same keys for encryption and decryption for both the Gigaset WLAN Repeater 108 and all your wireless network adapters.

➡ Select the ***Key length***: 64 bit or 128 bit.

➡ Select the ***Input type***, i.e. whether you wish to enter the key manually or have it generated automatically by means of a ***Passphrase***.

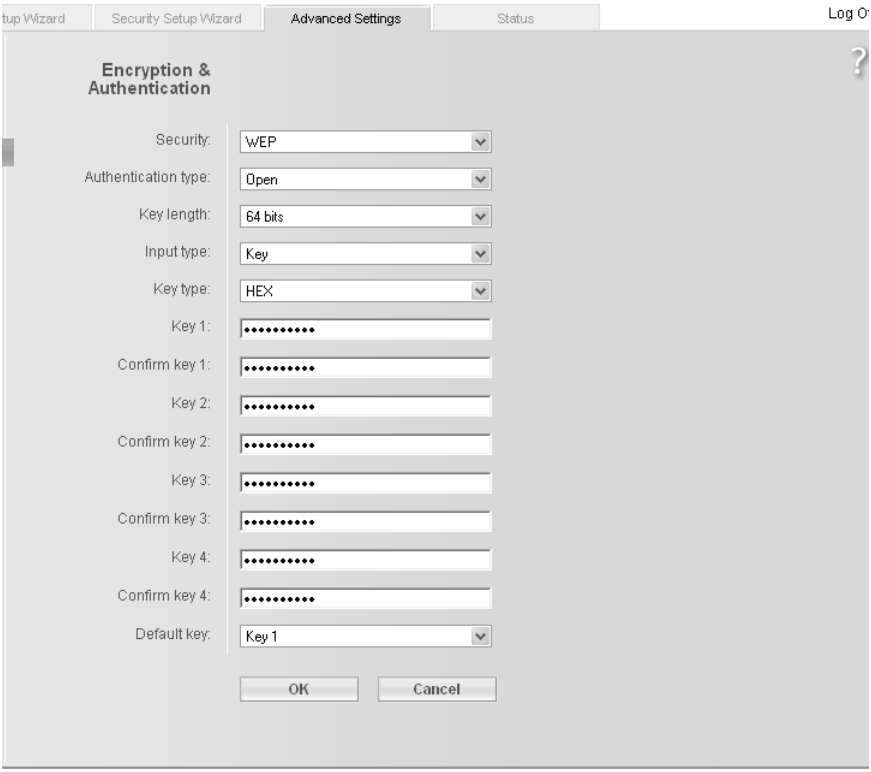
Generating the key by means of a Passphrase

➡ Enter a ***Passphrase*** (up to 32 characters) and confirm it by entering it again. Four keys are generated.

➡ Select one of the four keys as ***Default key***.

Manual key entry

➞ Select the ***Key type***, ***Hex*** or ***ASCII***.



If you select ***Hex*** you can use the characters **0** to **9** and **A** to **F**.

– With a 64 bit encryption depth the key is exactly 10 characters long.
  An example of a valid key: 1234567ABC
– With a 128 bit encryption depth the key is exactly 26 characters long.
  An example of a valid key: 234567ABC8912345DEF1234567

If you select ***ASCII*** you can use the characters **0** to **9**, **A** to **Z** and **a** to **z** plus the special characters in the ASCII character set.

– With a 64 bit encryption depth the key is exactly 5 characters long.
  An example of a valid key: GIGA1
– With a 128 bit encryption depth the key is exactly 13 characters long.
  An example of a valid key: GIGASET_SE551

➞ Enter up to four keys in fields ***Key 1*** to ***Key 4*** and confirm these keys by entering them again in fields ***Confirm key 1*** to ***Confirm key 4***.

➞ Select one of the four keys as ***Default key***.

Please note:

- It is very **important** that you make a note of the entered or generated key(s). You will need this information to configure the wireless network adapters properly.
- When you have concluded the configuration, you must change the WEP encryption on the wireless network adapters for the connected PCs in the same way as they will not otherwise be given access to the Gigaset WLAN Repeater 108's wireless network.
- It is very **important**, that you enter the keys that are currently valid in your wireless network. Otherwise, your Gigaset WLAN Repeater 108 cannot be used to extend your network.

➞ Click on ***OK*** to apply the settings.

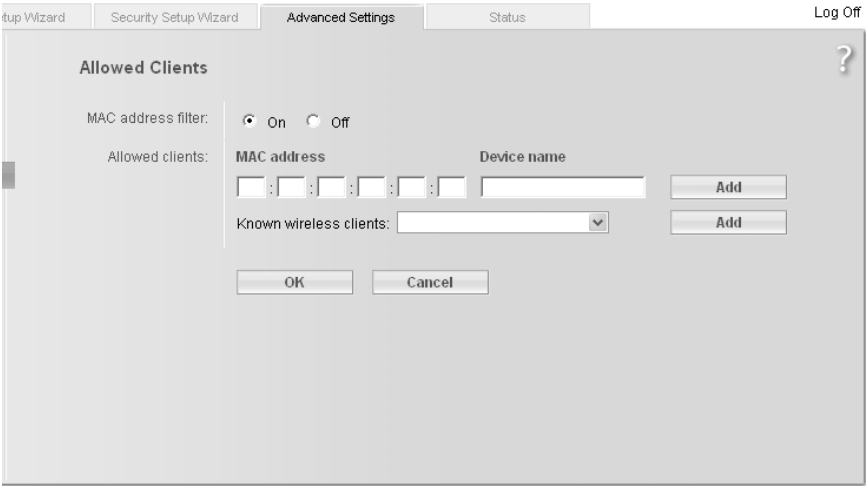
Permitted clients

Only Access Point and Repeater operating mode

In this screen you can specify which PCs will have wireless access to the Gigaset WLAN Repeater 108 and hence to your LAN.

Note:
The access control setting is only valid for wireless access from the PC to the repeater or access point. If you use a router in your wireless network and have configured access control there for PCs, this must also be set on the repeater.

➞ In the ***Wireless Network*** menu, select ***Allowed Clients***.



The default setting for access control is disabled. This means that all PCs that use the correct SSID can register.

The access control is based on the MAC addresss of the PCs' network adapters.

➞ Activate access control via the ***On*** option in the ***MAC address filter*** field.

Entering PCs manually:

➞ Enter the required PCs with ***MAC address*** and ***Device name*** in the appropriate fields.

➞ Click on the ***Add*** button to add the entry to the list.

➞ Click on the ***Delete*** button to delete the entry from the list.

➞ Apply the settings by clicking ***OK***.

Selecting from the list of logged-in PCs

➞ From the ***Known wireless clients*** list (all PCs that currently have access to the Gigaset WLAN Repeater 108), select the PC you want to add to the access control.

➞ Click on the ***Add*** button to add the entry to the list.

➞ Apply the settings by clicking ***OK***.

Please note:

If you activate MAC access control, you must at least enter the PC from which you are configuring the Gigaset WLAN Repeater 108. Otherwise you will no longer be able to access the user interface and a corresponding error message will be shown.

If, by mistake, you have denied all PCs access to the Gigaset WLAN Repeater 108 you have two choices:

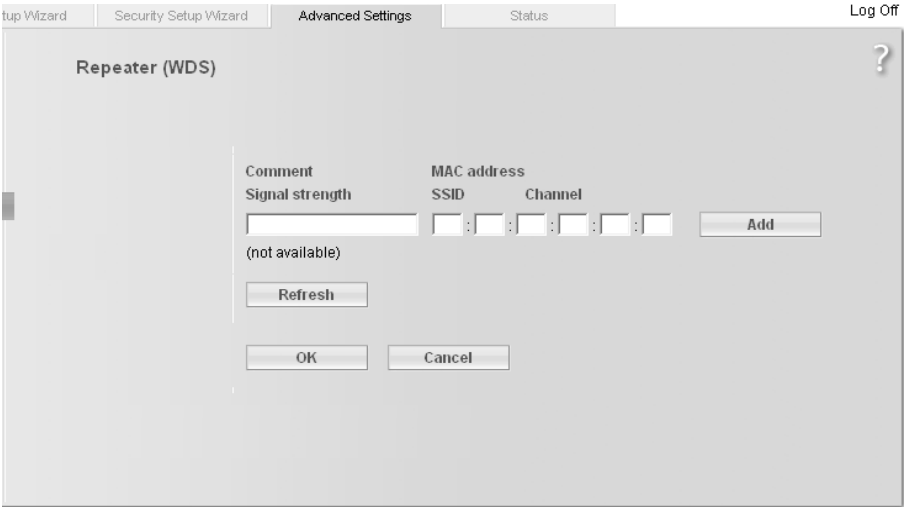
- You can completely reset the Gigaset WLAN Repeater 108 (see page 11).
- You can connect a PC to the Gigaset WLAN Repeater 108 using one of the LAN connections. As MAC access control only applies to PCs that are connected wirelessly, you can use this PC to change the configuration.

Repeater function (WDS)

Only Repeater Operating Mode

If you use the device in Repeater Operating Mode and want to increase the range in your wireless network, you must configure the Wireless Distribution System (WDS) function.

➞ In the ***Wireless Network*** menu, select ***Repeater (WDS)***.



The name of the access point is shown in the ***Comment*** field.

If there is a connection, the MAC address of the access point is shown in the ***MAC address*** field.

If there is a connection to the access point, the SSID is shown in the ***SSID*** field

The radio channel used for data transfer is shown in the ***Channel*** field.

If there is a connection to the access point, the ***Signal strength*** shows the strength of the connection to the repeater in percentage terms.

➞ Click on ***Refresh*** to update the display.

➞ Click on ***Add*** to add an entry.

➞ Click on ***Delete*** to delete an entry.

➞ Apply the settings by clicking ***OK***.

Note:
If you have encrypted the data with one of the WPA standards, you can only select one access point. More than one access point is only possible with WEP encryption (page 58).

Administration

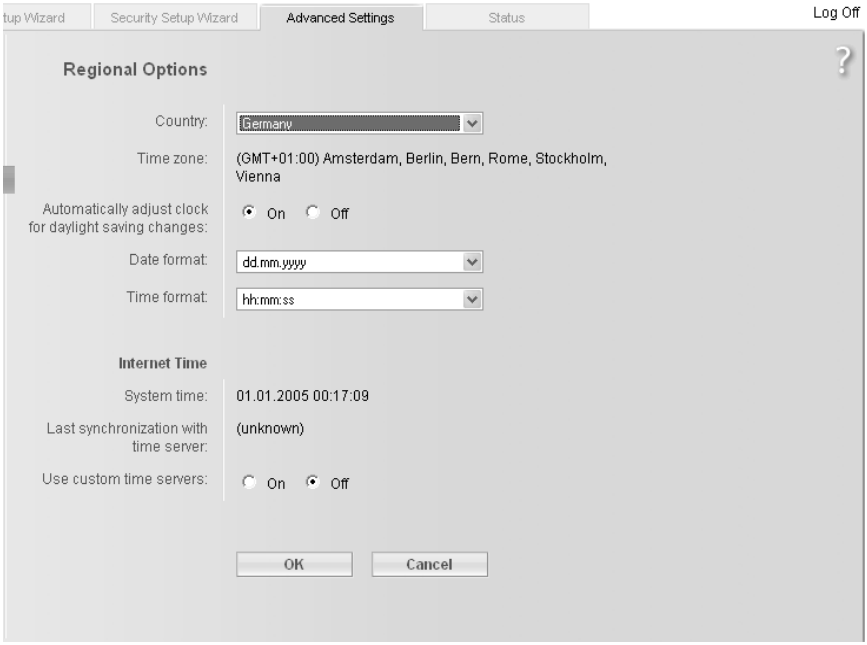
The Gigaset WLAN Repeater 108 user interface includes several helpful functions for administration. You can

- make regional settings (see page 64),
- change the system password (see page 66),
- save, and if necessary restore, configuration data (see page 67),
- reset the Gigaset WLAN Repeater 108 to the factory settings (see page 68),
- restart the device (see page 68),
- update the firmware (see page 69),
- make the settings for the system log (see page 71),
- view information about the configuration and status of the Gigaset WLAN Repeater 108 (see page 72).

Regional Options

To operate your Gigaset WLAN Repeater 108, you can select the location, time zone and format for entering the date and time, and you can also configure a time server for the Internet time.

➡ In the ***Advanced Settings*** – ***Administration*** menu, select the entry ***Regional Options***.



➞ Select the country where you are currently located from the list. You can set the clock to change automatically to summer time and/or to the ***Time zone*** as you wish.

➞ Select the required option and/or select the ***Time zone*** for your location.

➞ Select the required format for entering the date and time from the ***Date format*** and ***Time format*** lists respectively.

Internet Time

The ***System time*** for your device is automatically synchronised with the time server on the Internet. The time of the ***Last synchronization with time server*** is displayed for your information.

➞ If you wish to use your own time server, select the ***On*** option next to the ***Use custom time servers*** field.

➞ Enter the Internet address for the time server in the ***Preferred time server*** and ***Alternate time server*** fields respectively.

➞ Click on ***OK*** to apply the settings.

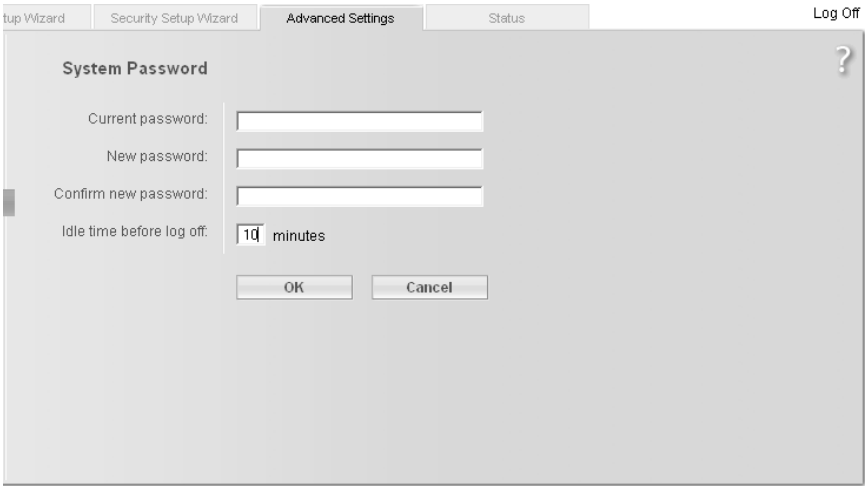
Please note:
If the Gigaset WLAN Repeater 108 does not have direct access to the Internet, it may not access the time server.

System Password

You can assign a System Password for the configuration environment of your Gigaset WLAN Repeater 108, and specify the period after which a session is to end automatically if no further entry is made.

Note:
Only one connection to the configuration environment can be started at any one time.

➞ In the ***Administration*** menu, select ***System Password***.



After installation, the Gigaset WLAN Repeater 108 configuration is protected by the System Password **admin**. To prevent unauthorised changes to the configuration, you should change the System Password. You may have already set a System Password when setting up the ***Security Setup Wizard***. If so, you can change it here.

➞ Enter the current System Password in the ***Current password*** field.

➞ Enter a new password in the ***New password*** field, and repeat it in the ***Confirm new password*** field.

The password may contain up to 20 characters. The password is case sensitive. Avoid proper names and words that are too obvious. Use a combination of letters, numbers and special characters.

Please note:
If you ever forget your System Password, you will have to reset your Gigaset WLAN Repeater 108 (see page 11). Please bear in mind that this will restore **all** the settings to the factory configuration. The password is reset to the default setting **admin**.

Setting Idle time before log off:

➞ Enter the period in minutes after which the configuration program is to be aborted if no entry is made. The default setting is 10 minutes. If you enter the value 0, the program will never be aborted automatically.

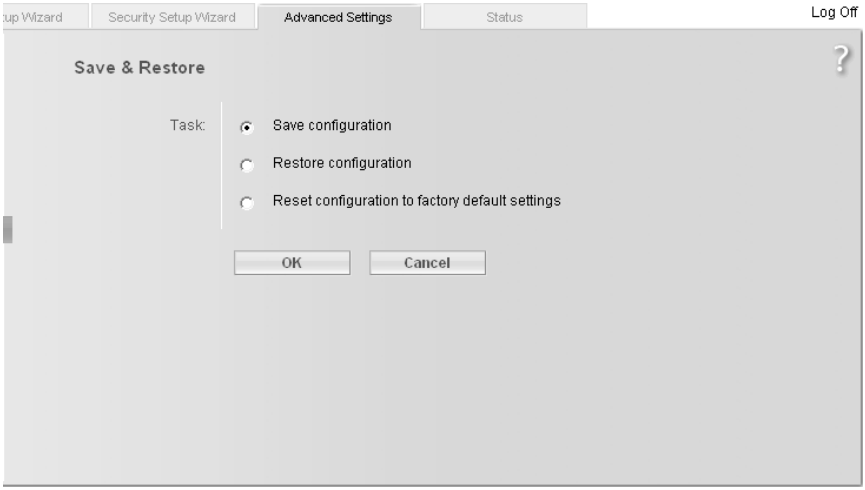
➞ Click on ***OK*** to apply the settings.

Saving and restoring a configuration

Once you have configured your Gigaset WLAN Repeater 108, it is advisable to back up the settings. Then you can restore them at any time, should they be accidentally deleted or overwritten.

You can also reset the configuration to the factory settings. You should always do this before passing your device on to any other person.

◆ In the ***Administration*** menu, select ***Save & Restore***.



Saving configuration data

➞ For ***Task,*** select the option ***Save configuration***.

This opens a file selection window where you can specify the file you wish to store in the backup file.

➞ On your local PC select a directory where you wish to store the configuration file, and enter a name for the file.

➞ Click on ***Save***.

Once the procedure has been completed, the current configuration data will have been backed up in the specified file. As your file contains all your configuration data, you should protect it from unauthorised access.

Restoring the back-up

➞ For ***Task,*** select the option ***Restore configuration***.

➞ In your file system, select the backup file with which you wish to restore the configuration.

A window will appear prompting you to confirm the procedure.

➞ Click on ***OK***. The configuration will now be updated.

Resetting to the factory settings

You can reset the Gigaset WLAN Repeater 108 to the factory settings. You should do this before making the device available to others or exchanging it through the dealer.

➞ Select the option ***Reset configuration to factory default settings*** and click on ***OK***.

A window will appear prompting you to confirm the procedure.

Please note:

You can restart your Gigaset WLAN Repeater 108 if it is not working properly. It should then be ready for use again (see page 11).

Please bear in mind that when the device is fully reset, **all** configuration settings will return to the factory settings. This means that you will have to completely reconfigure the Gigaset WLAN Repeater 108. This does not affect firmware loaded at an earlier stage.

Reboot

You can restart your Gigaset WLAN Repeater 108 if it is not working properly. It should then be ready for use again.

In the ***Administration*** menu, select ***Reboot***.

Click on ***OK*** to restart the device.

Updating firmware

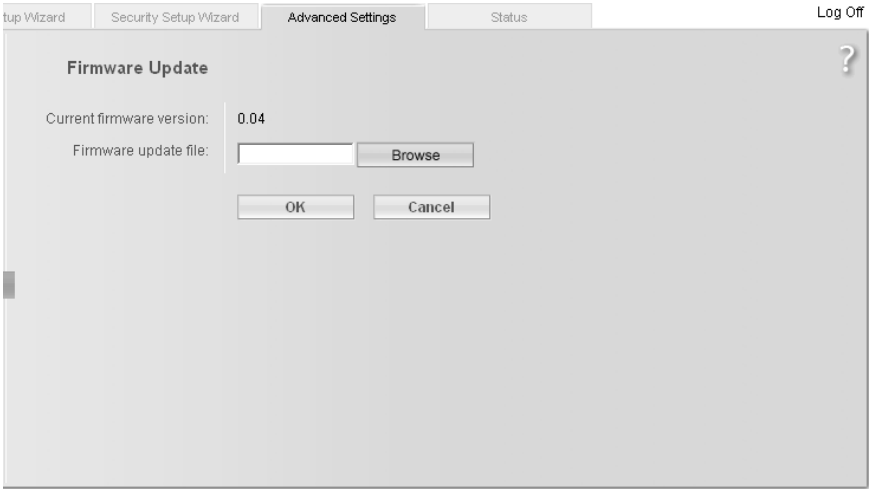
Siemens continuously updates the device software for your Gigaset WLAN Repeater 108 in order to always offer you the latest standards. For this reason you should find out regularly whether new firmware is available for your device. You will find more information about the firmware and your Gigaset WLAN Repeater 108 on the Internet at: www.siemens.com/gigasetcustomercare.

If a new version of the firmware is made available on the Internet, you can update this on your device. First download the new firmware on your PC, and then update the Gigaset WLAN Repeater 108.

Carry out the following steps:

➞ Close down all network activities on your local network.

➞ In the ***Administration*** menu, select ***Firmware Update***.



The version of the firmware currently running on your device is displayed in the line ***Current firmware version***.

➞ In the ***Firmware update file*** field, enter the file with the new firmware you have downloaded from the Internet.

➞ Click on ***OK***.

The firmware will now be updated.

Please note:
Do not switch off your Gigaset WLAN Repeater 108, your PC or the local network during the updating procedure.

After successful updating, the device is automatically restarted. All the LEDs will go out. The WLAN LED flashes when the device is restarting (see page 10). When the procedure is complete, the browser shows the configuration program login screen.

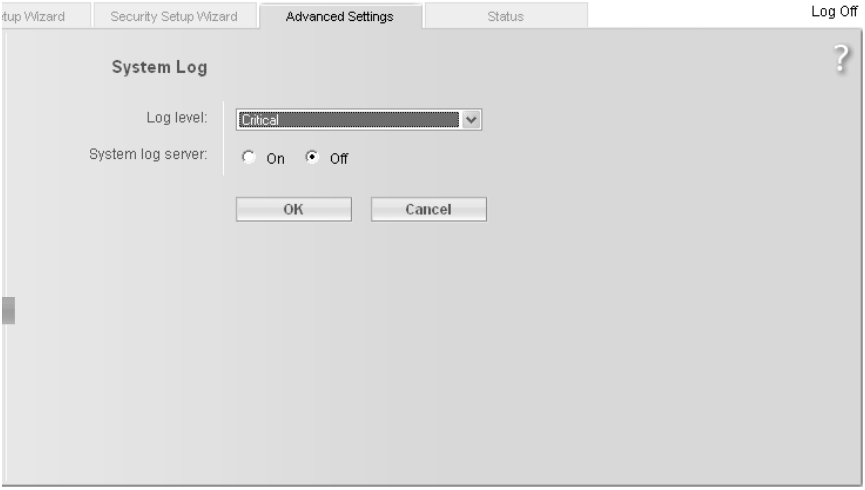
This may take a few minutes.

Please note:
You can check whether the upgrade process was in fact successful in the ***Status*** menu on the start screen (see page 72). Here you should see the latest firmware version for the Gigaset WLAN Repeater 108.

System Log

The System Log is displayed in the ***Status*** – ***Device*** menu. It can give you important information about the functioning of your device and possible problems. You can also have this information transmitted automatically on a system log server.

➔ In the ***Administration*** menu, select ***System Log*** to make the settings for the log.



➔ ***Log level***: Select how much information is to be contained in the system log. You can choose between four levels:

- ***Critical***: logs the most important information concerning possible problems in the functioning of your device
- ***Debugging***: complete and detailed information about all your device's functions
- ***Warning*** and ***Informational*** are intermediate levels.

➔ ***System log server***

- Activate this function if you require automatic transmission of your device's system log to a system log server in your local network.
- ***Server address***:
  Enter the IP address for the system log server.
- ***Server port***:
  Enter the port of the system log server that is to be used to transmit the system log.

➔ Click on ***OK*** to save and apply the changes. If you have activated the ***System log server*** function, the data will be transmitted to the specified server.

Status information

You can view information about the configuration and status of the Gigaset WLAN Repeater 108 in the ***Status*** menu of the Gigaset WLAN Repeater 108. On the first screen you will see an overview of the status of the local and wireless network, and of the device.

For detailed information you can view the following status screens:

- ***Security***
- ***Local Network***
- ***Wireless Network***
- ***Device***

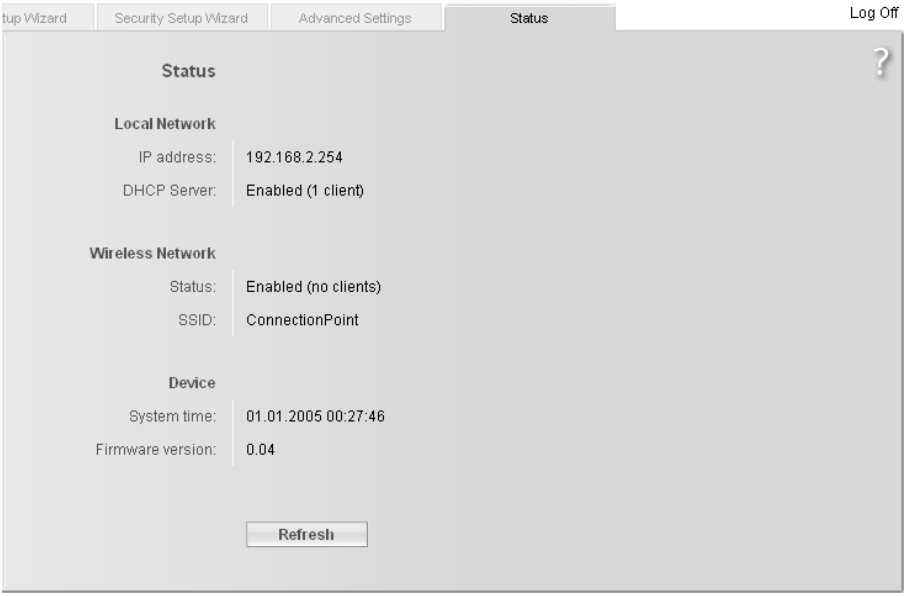
To display a status screen, proceed as follows:

➞ Select ***Status*** on the start screen.

➞ Select the entry with the information you require.

Overview

On the first screen you are given an overview of the current operating status and most important data for your device.



Local network

- ***IP address***
  The local IP address of your device.
- ***DHCP Server***
  Is not displayed in the Ethernet adapter Operating Mode.
  The status of the DHCP server for your device and, if activated, the number of clients in your network to which an IP address has been assigned.

Wireless network

- ***Status***
  The status of the wireless network connection for your device and, if activated, the number of clients in your wireless network connected to your device.
- ***SSID***
  The identification of your wireless network.

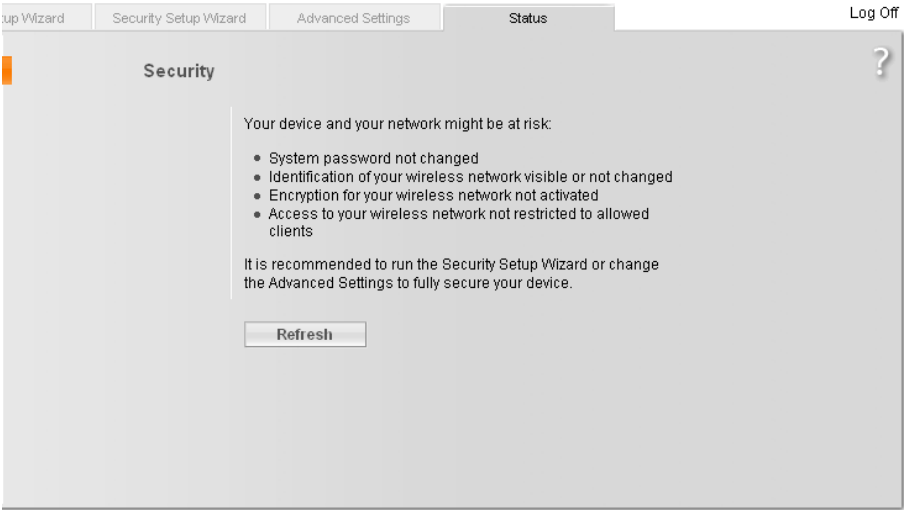
Device

- ***System time***
  Your device's system time.
- ***Firmware version***
  The version of the firmware currently installed in your device.

➥ Click on ***Refresh*** to refresh this screen and update the displayed data.

Security

On the ***Security*** screen in the ***Status*** menu you will see information about possible security risks for your device and your network. You will achieve maximum security for the Gigaset WLAN Repeater 108 by eliminating all the listed security risks.


up Wizard
Security Setup Wizard
Advanced Settings
Status
Log Off
Security
Your device and your network might be at risk:
System password not changed
Identification of your wireless network visible or not changed
Encryption for your wireless network not activated
Access to your wireless network not restricted to allowed clients
It is recommended to run the Security Setup Wizard or change the Advanced Settings to fully secure your device.
Refresh

- ***System password not changed***

  Your device's configuration program is not effectively protected against unauthorised access, as you have either not changed the password since setting the device up or you have not assigned any password at all. The section entitled "System Password" on page 66 describes how to avoid this security risk.

- ***Identification of your wireless network visible or not changed***

  Your wireless network will also be easy for unauthorised users to find as you have not changed the ID of your wireless network (SSID) since setup, and you have not deactivated the SSID broadcast. The section entitled "Setting wireless security" on page 55 describes how to avoid this security risk.

- ***Encryption for your wireless network not activated***

  None of the data in your wireless network is encrypted when transmitted and can therefore easily be intercepted. Unauthorised users can also easily access your network, your PCs and your Internet connection by this means. The section entitled "Setting wireless security" on page 55 describes how to avoid this security risk.

- ***Access to your wireless network not restricted to allowed clients***

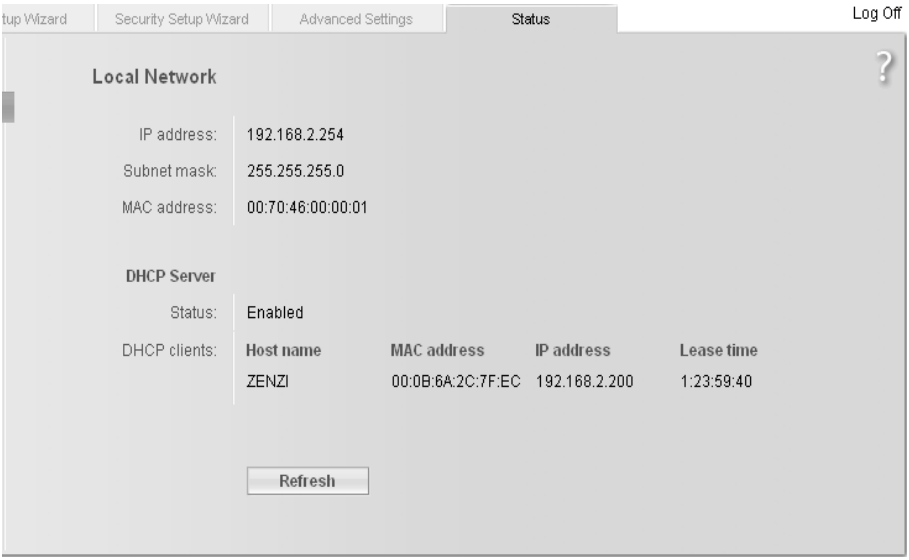
  This is only displayed in access point and repeater operating modes.

  Users can access your wireless network from any PC. The section entitled "Permitted clients" on page 61 describes how to avoid this security risk.

➡ Click on ***Refresh*** to refresh this screen and update the displayed data.

Local Network

On the ***Local Network*** screen in the ***Status*** menu you will find information about the settings for your local network.

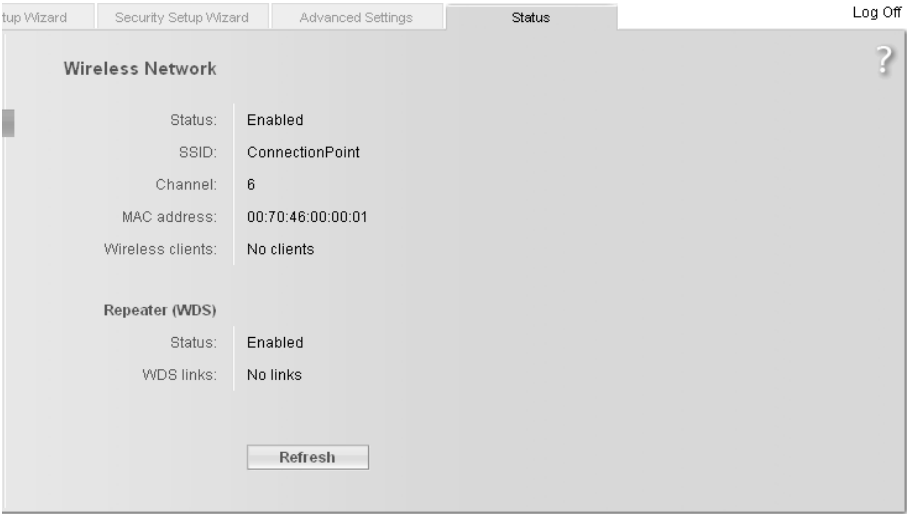


- ***IP address***
  Shows the local IP address of your device.
- ***Subnet mask***
  Shows the subnet mask used in the local network.
- ***MAC address***
  Shows the local MAC address of your device for wired data transmission.
- ***DHCP Server***
  Is not displayed in the Ethernet adapter Operating Mode.
  - ***Status***
    Shows the status of the DHCP server for your device for automatic assignment of IP addresses to clients in your local network.
  - ***DHCP clients***
    Shows all clients in your network who have been assigned an IP address. The ***Host name*** and the ***MAC address*** of each client are listed for identification. You are also given information on the ***IP address*** assigned to each client and the remaining ***Lease time*** for the IP address, before the client is assigned a new address by the DHCP server.

➡ Click on ***Refresh*** to refresh this screen and update the displayed data.

Wireless Network

On the ***Wireless Network*** screen in the ***Status*** menu you will find information about the settings for your wireless network.



- ***Status***
  Shows the status of the connection between your device and the wireless network.
- ***SSID***
  Shows the identification of your wireless network.
- ***Channel***
  Shows the radio channel currently used for transmitting data within your wireless network.
- ***MAC address***
  Shows the local MAC address of your device for wireless data transmission.
- ***Wireless clients***
  Is not displayed in the Ethernet adapter Operating Mode.

  Shows all clients in your wireless network currently connected to your device. The ***Host name***, the ***MAC address*** and the ***IP address*** of each client are listed for identification. You will also see information about the ***Uptime*** to date of the current connection for each client in your wireless network.

- ***Repeater (WDS)***

  Only displayed in Repeater Operating Mode.

  – ***Status***

    Shows the status of the WDS (Wireless Distribution System) in your wireless network for increasing the range.

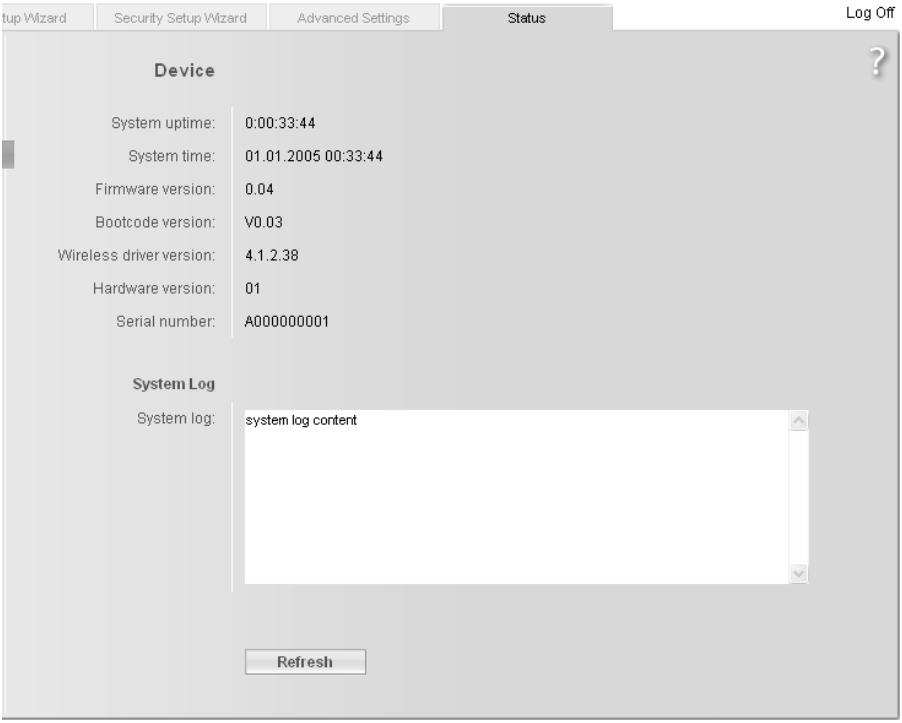
  – ***WDS links***

    Shows the current number of connections to other access point or repeaters in your wireless network.

➔ Click on ***Refresh*** to refresh this screen and update the displayed data.

Device

On the ***Device*** screen in the ***Status*** menu you will find information about the most important data for your device.



- ***System uptime***
  Shows your device's operating time since the last time the system was started.
- ***System time***
  Shows the system time for your device.
- ***Firmware version***
  Shows the version of the firmware currently installed in your device.
- ***Bootcode version***
  Shows the version of the boot code currently installed in your device.
- ***Wireless driver version***
  Shows the version of the WLAN driver currently installed in your device.
- ***Hardware version***
  Shows the version of your device's hardware.
- ***Serial number***
  Shows your device's serial number.

- ***System Log***

  The system log can give you important information about the functioning of your device and possible problems. You can adjust the scope of the system log to suit your needs (see the section entitled "System Log" on page 71).

➞ Click on ***Refresh*** to refresh this screen and update the displayed data.

Appendix

This appendix contains information about:

- Basic settings for wireless connection of two games consoles (see below)
- Configuring the network (see page 82)
- Updating IP addresses (see page 107)
- Troubleshooting (see page 111)
- Specifications (see page 116)
- Approval (see page 117)
- Customer Care (see page 119)

Settings for wireless connection for games consoles and set-top boxes

The following example describes what settings you need to make if you want to wirelessly connect two games consoles using two Gigaset WLAN Repeater 108 devices.

The configuration description always refers to the factory settings of the Gigaset WLAN Repeater 108.

Configuring the first Gigaset WLAN Repeater 108 (as an access point)

➡ Start up the user interface of the Gigaset WLAN Repeater 108 from the PC (see page 16) and select Basic Setup Wizard.

➡ Select ***Access point*** as ***Operating Mode***.

➡ On the wireless network settings screen, select the ***Channel*** and enter the required ***SSID***.

In Super G mode (see page 54), however, the channel is set automatically.

➡ On the local network settings screen, select the following options:

- ***IP address type***: ***Static***
- ***DHCP Server***: ***On***

➡ On the Security Setup Wizard close-down screen, deactivate the option to start the Basic Setup Wizard and click ***Finish***.

Configuring the second (and further) Gigaset WLAN Repeater 108 (as an Ethernet adapter)

➡ Start up the user interface of the Gigaset WLAN Repeater 108 from the PC (see page 16) and select Basic Setup Wizard.

➡ Select ***Ethernet adapter*** as ***Operating Mode***.

➡ On the wireless network settings screen, enter the same SSID that you used in the first device (access point).

➡ On the local network settings screen, select the ***Obtained automatically*** option for the ***IP address type***.

➡ On the Security Setup Wizard close-down screen, deactivate the option to start the Basic Setup Wizard and click ***Finish***.

Connecting and getting started

➡ Connect the first device (access point) to games console 1. To do this, connect the LAN ports of the Gigaset WLAN Repeater 108 and the games consoles with an Ethernet cable.

➡ Switch on the Gigaset WLAN Repeater 108 and wait until it is ready for use (WLAN LED lights up).

➡ Switch on games console 1 and configure the console's network settings as directed in its user guide.

➡ Connect the second device (Ethernet adapter) to games console 2. To do this, connect the LAN ports of the Gigaset WLAN Repeater 108 and the games consoles with an Ethernet cable.

➡ Switch on the Gigaset WLAN Repeater 108 and wait until it is ready for use (WLAN LED lights up).

➡ Switch on games console 2 and configure the console's network settings as directed in its user guide.

Please note:

1. If your games console has a USB port, you can also use the supplied USB cable to supply power to the Gigaset WLAN Repeater 108 – providing the games console can emit sufficient power.
2. A Gigaset WLAN Repeater 108 can also be configured to interact with a Gigaset M740 AV.

Integration in the network

If you wish to use your Gigaset WLAN Repeater 108 in Ethernet adapter Operating Mode, i.e. if you wish to connect a PC or a games console wirelessly to a local network, you may have to carry out a network configuration. PC settings are, however, often already correct, in which case the step described in this chapter need not be carried out. You can do this using the tools provided by the Windows operating system on your PC.

The following steps are required:

- First install the TCP/IP protocol as the network protocol on your system. This step is not necessary if your system has already been configured for TCP/IP connections.

  As a rule, Windows XP automatically integrates network cards to the local network via TCP/IP.

  For Windows 2000 and Windows 98 SE/ME, TCP/IP is not normally installed. Information is given on how to install the TCP/IP protocol for the network adaptor for these systems (for Windows 2000 on page 85, for Windows 98 SE/ME on page 88). If application of the network protocols was not envisaged during installation of the operating system, you will be prompted to insert your CD-ROM containing the operating system.
- You define the addressing for your network card. If you want to use your Gigaset WLAN Repeater 108 as a Repeater or an Access point, select automatic address allocation (see page 93). If you want to use your device as a network adapter, assign a static IP address (see page 100).

First configure the network settings for a PC. Then you can use this PC to configure the Gigaset WLAN Repeater 108. After that you can connect further PCs.

To start the configuration program, you may need to deactivate your browser's HTTP proxy. If you use Windows XP Service Pack 2, you will need to configure the popup blocker. Both procedures are described on the subsequent pages.

Windows XP

Note:
The name of the menu items may differ slightly from one version of Windows XP to another. However, the configuration settings described below apply generally.

➡ Click on ***Start*** – ***Control Panel***.

➡ Click on ***Network connections***.

➡ Double-click on the LAN connection, via which you are connected to the Gigaset WLAN Repeater 108.

➡ On the ***General*** tab, click on ***Properties***.

➡ From the list, select the entry ***Internet Protocol (TCP/IP)*** and click on ***Properties***.

➡ If the ***Obtain an IP address automatically*** and ***Obtain DNS server address automatically*** options have already been activated, your PC is already configured for DHCP. Click on ***Cancel*** and close the following windows with ***OK*** to save your network configuration.

Otherwise, in the ***General*** tab, activate the ***Obtain an IP address automatically*** and ***Obtain DNS server address automatically*** options.

➡ Click on ***OK*** or ***Close*** to close each window.

Deactivating the HTTP proxy

Make sure that the HTTP Proxy in your Web browser is deactivated. This function must be deactivated so that your Web browser can access your Gigaset WLAN Repeater 108's configuration pages.

The following section describes the procedure for Internet Explorer and Mozilla Firefox. First decide which browser you are using and then follow the appropriate steps.

◆ **Internet Explorer**

➡ Open Internet Explorer and click on ***End***. Click on ***Tools*** and then on ***Internet Options***.

➡ In the ***Internet Options*** window click on the ***Connections*** tab.

➡ Click on ***Settings***.

➡ Deactivate all options in the ***Settings for local network (LAN)*** window.

➡ Click on ***OK*** and then ***OK*** again to close the ***Internet Options*** window.

◆ **Mozilla Firefox**

➥ Open Mozilla Firefox. Click on ***Tools*** and then on ***Settings***.

➥ In the ***Settings*** window, click on ***Connection Settings...***

➥ In the ***Connection Settings*** window, select the option ***Direct connection to the Internet***.

➥ Click on ***OK*** to finish.

Configuring the popup blocker

You must allow popups for the configuration program in order to start it.

◆ **Internet Explorer**

If working with Windows XP Service Pack 2, popups are blocked by default. Carry out the following steps:

➥ Right-click on the browser information bar.

➥ Select ***Allow popups from this screen***.

➥ Confirm the dialogue window by clicking on ***OK***.

The configuration screens for the Gigaset WLAN Repeater 108 are now allowed as pop-ups.

You can make additional settings for popups within Internet Explorer via the ***Tools – Popup Manager*** menu item or via ***Tools – Internet Options*** in the ***Privacy*** tab.

◆ **Mozilla Firefox**

Popups are blocked by default. Carry out the following steps:

➥ Open Mozilla Firefox. Click on ***Tools*** and then on ***Settings***.

➥ In the ***Settings*** window, click on the ***Web features*** tab.

➥ In the ***Web Features*** window, deactivate the ***Block Popup window***.

➥ Click on ***OK*** to finish.

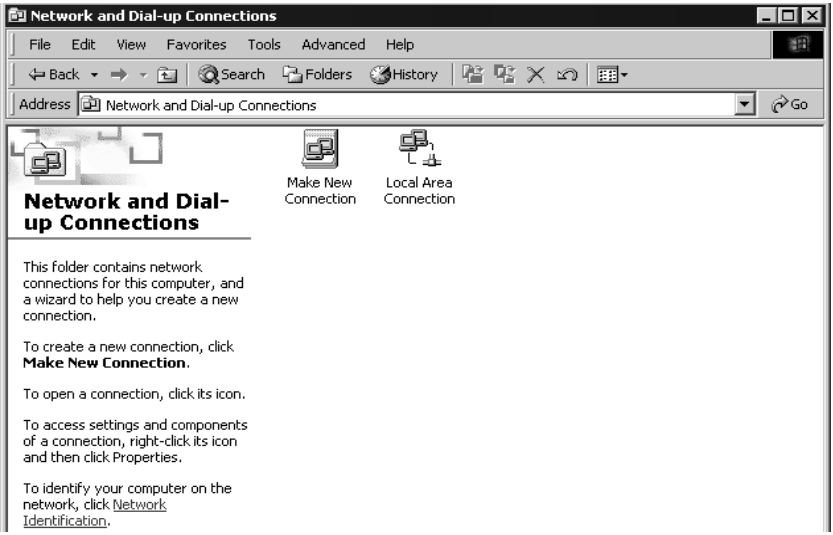
Please note:
Should you use a different popup blocker, you must configure this accordingly.

Windows 2000

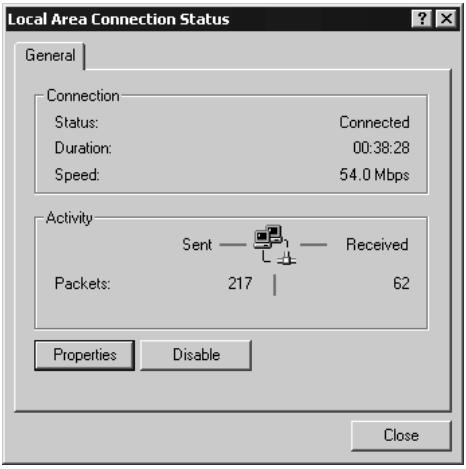
Install the TCP/IP protocol

➞ Select ***Start – Settings – Control Panel***.

➞ Double-click on the ***Network and Dial-up Connections*** icon.

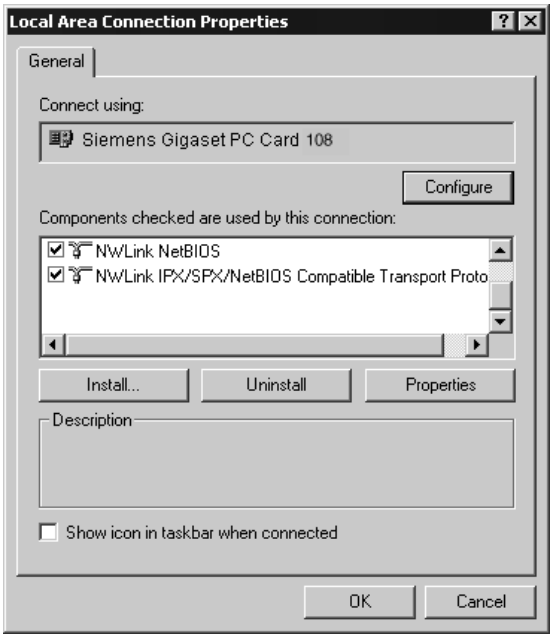

Network and Dial-up Connections
File Edit View Favorites Tools Advanced Help
Back Search Folders History
Address Network and Dial-up Connections
Go
Make New Connection
Local Area Connection
Network and Dial-up Connections
This folder contains network connections for this computer, and a wizard to help you create a new connection.
To create a new connection, click Make New Connection.
To open a connection, click its icon.
To access settings and components of a connection, right-click its icon and then click Properties.
To identify your computer on the network, click Network Identification.

➞ In the ***Network and Dial-up Connections*** window, double-click on the icon of the ***LAN Connection*** you use for connecting to the Gigaset WLAN Repeater 108.

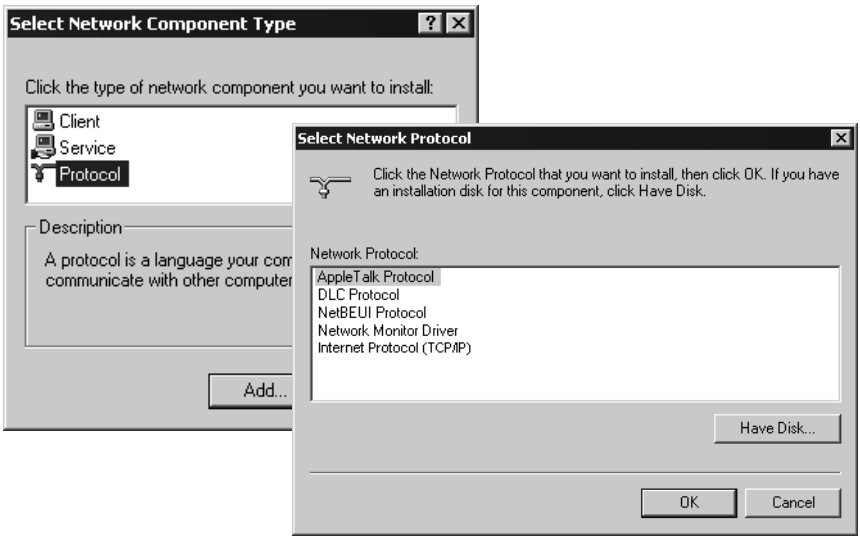


➞ Click on ***Properties***.

➞ In the next window click on ***Properties*** again.



➞ Check whether the displayed list on the ***General*** tab contains an entry for **Internet protocol (TCP/IP)** and whether this has been activated. If so, you can terminate the procedure here. Otherwise, click on ***Install*** to install the protocol.



➞ Select ***Protocol*** and click on ***Add***.

➔ In the ***Network protocol*** list, select ***Internet protocol (TCP/IP)***.

➔ Click on ***OK***.

You will now see the TCP/IP protocol in the ***LAN connection properties*** window.

➔ Click on ***OK***.

You will see a message telling you that the setting will not take effect until you restart your PC.

➔ Confirm this screen with ***OK***.

This restarts your PC.

Deactivating the HTTP proxy

Make sure that the HTTP Proxy in your Web browser is deactivated. This function must be deactivated so that your Web browser can read your Gigaset WLAN Repeater 108's configuration pages.

The following section describes the procedure for Internet Explorer and Mozilla Firefox. First decide which browser you are using and then follow the appropriate steps.

◆ **Internet Explorer**

➔ Open Internet Explorer. Click on ***Tools*** – ***Internet Options***.

➔ In the ***Internet Options*** window click on the ***Connections*** tab.

➔ Click on ***LAN settings***.

➔ Deactivate all options in the ***Settings for local network (LAN)*** window.

➔ Click on ***OK*** and then ***OK*** again to close the ***Internet Options*** window.

◆ **Mozilla Firefox**

➔ Open Mozilla Firefox. Click on ***Tools*** and then on ***Settings***.

➔ In the ***Settings*** window, click on ***Connection Settings...***

➔ In the ***Connection Settings*** window, select the option ***Direct connection to the Internet***.

➔ Click on ***OK*** to finish.

Configuring the popup blocker

Popups are blocked by default for Mozilla Firefox. If you use the Mozilla Firefox browser, you must allow popups for the configuration program in order to start it. Carry out the following steps:

➔ Open Mozilla Firefox. Click on ***Tools*** and then on ***Settings***.

➔ In the ***Settings*** window, click on the ***Web features*** tab.

➔ In the ***Web Features*** window, deactivate the ***Block Popup window***.

➔ Click on ***OK*** to finish.

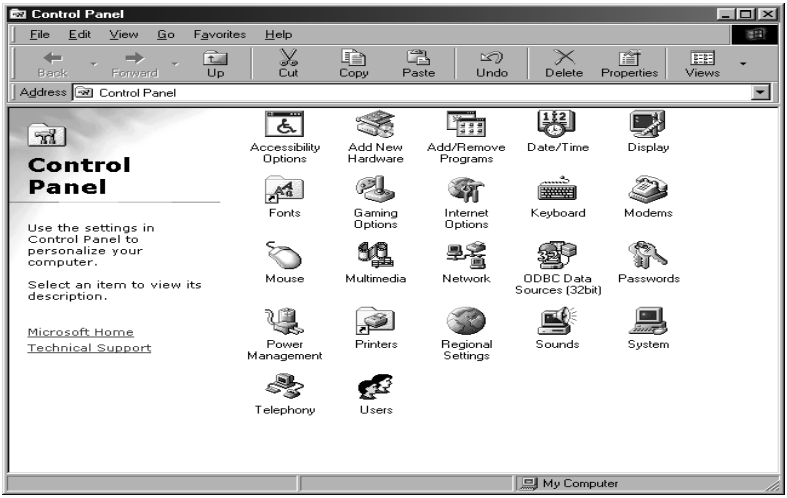
Please note:
Should you use a different popup blocker, you must configure this accordingly.

Windows 98 SE/ME

Installing the TCP/IP protocol

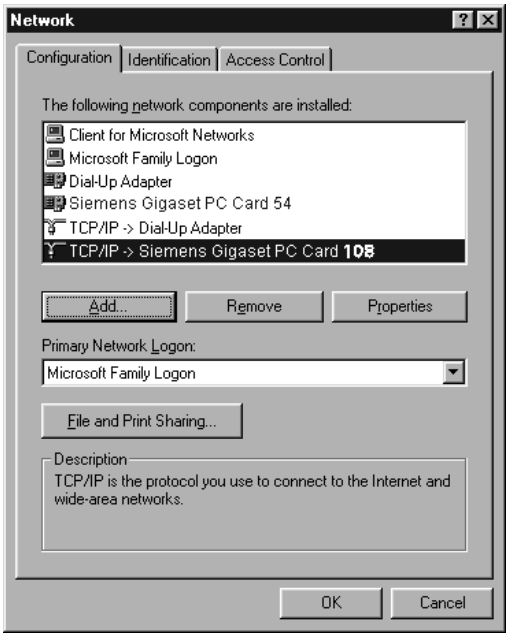
➞ Select ***Start – Settings – Control Panel***.

This opens the Windows control panel.



➞ Double-click on the ***Network*** icon.

➞ In the next window, select the name of the network adapter you use to set up the connection between your PC and the Gigaset WLAN Repeater 108.

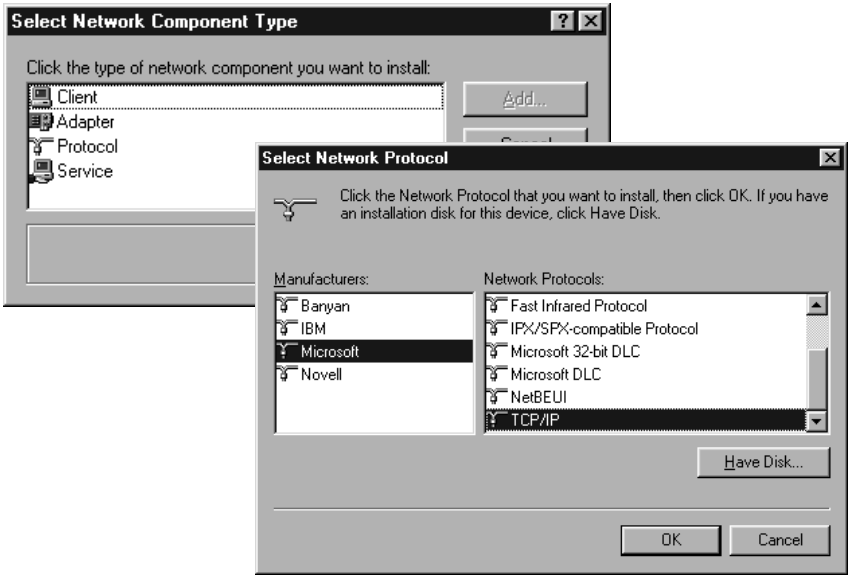


➞ Check whether there are any other entries for the card starting with ***TCP/IP ->***.

If so, then the TCP/IP protocol has already been installed. You can terminate the procedure at this point.

➞ If there is no TCP/IP entry, click on the ***Add*** button.

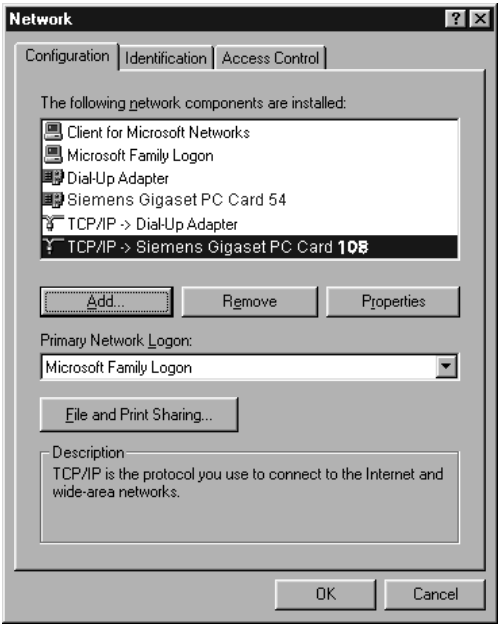
➞ In the next window, click on ***Protocol*** and then on ***Add***, or double-click on ***Protocol***.



➞ In the ***Manufacturer*** field, select ***Microsoft***. Then in the ***Network protocols*** field, select ***TCP/IP***.

➞ Then click on ***OK***.

You will now see the ***Network*** window again. The TCP/IP entry for the network adapter has now been added.



➞ Click on ***OK***.

You will see a message telling you that the setting will not take effect until you restart your PC.

➞ Confirm this screen with ***OK***.

This restarts your PC.

Deactivating the HTTP proxy

Make sure that the HTTP Proxy in your Web browser is deactivated. This function must be deactivated so that your Web browser can access your Gigaset WLAN Repeater 108's configuration pages.

The following section describes the procedure for Internet Explorer and Mozilla Firefox. First decide which browser you are using and then follow the appropriate steps.

◆ **Internet Explorer**

➞ Open Internet Explorer. Click on ***Tools*** – ***Internet Options***.

➞ In the ***Internet Options*** window click on the ***Connections*** tab.

➞ Click on ***LAN settings***.

➞ Deactivate all options in the ***Settings for local network (LAN)*** window and click on ***OK***.

➞ Click on ***OK*** again to close the ***Internet Options*** window.

◆ **Mozilla Firefox**

➥ Open Mozilla Firefox. Click on ***Tools*** and then on ***Settings***.

➥ In the ***Settings*** window, click on ***Connection Settings...***

➥ In the ***Connection Settings*** window, select the option ***Direct connection to the Internet***.

➥ Click on ***OK*** to finish.

Configuring the popup blocker

Popups are blocked by default for Mozilla Firefox. If you use the Mozilla Firefox browser, you must allow popups for the configuration program in order to start it. Carry out the following steps:

➥ Open Mozilla Firefox. Click on ***Tools*** and then on ***Settings***.

➥ In the ***Settings*** window, click on the ***Web features*** tab.

➥ In the ***Web Features*** window, deactivate the ***Block Popup window***.

➥ Click on ***OK*** to finish.

Please note:
Should you use a different popup blocker, you must configure this accordingly.

Assigning IP addresses automatically

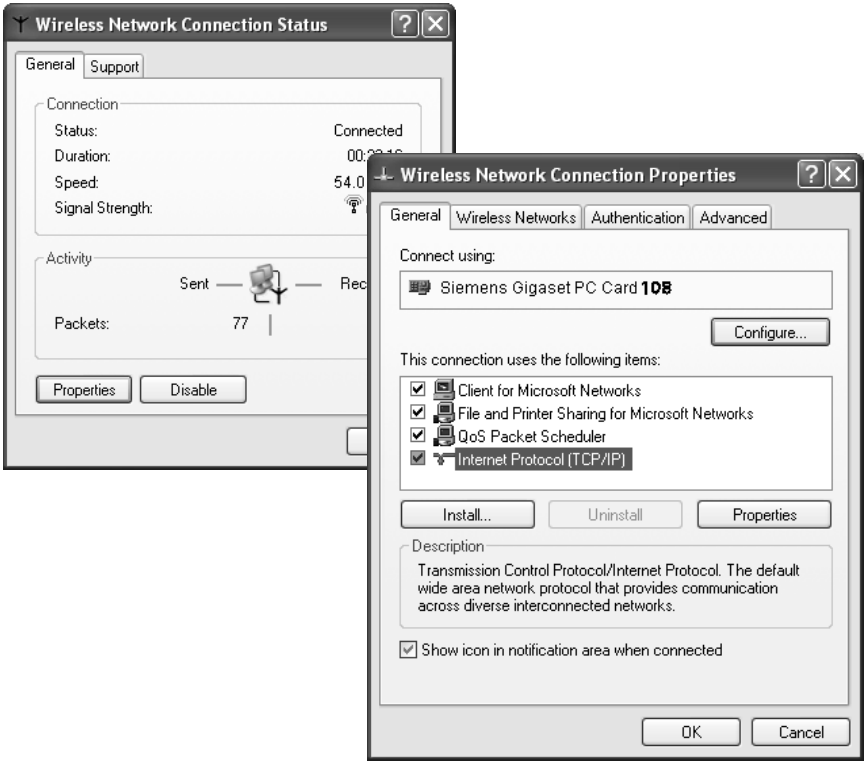
Your Gigaset WLAN Repeater 108 has a DHCP server that automatically assigns addresses in the network. As a rule, you do not have to do anything, as the ***Obtain an IP address automatically*** function field is set during the installation of TCP/IP. If, however, you integrate your Gigaset WLAN Repeater 108 in an existing network with static address blocks, domain names or subnets or if you cannot launch the configuration program straight away, you should check the TCP/IP properties and make any necessary changes. This is described below.

Windows XP

➞ Click on ***Start*** and select ***Control panel***.

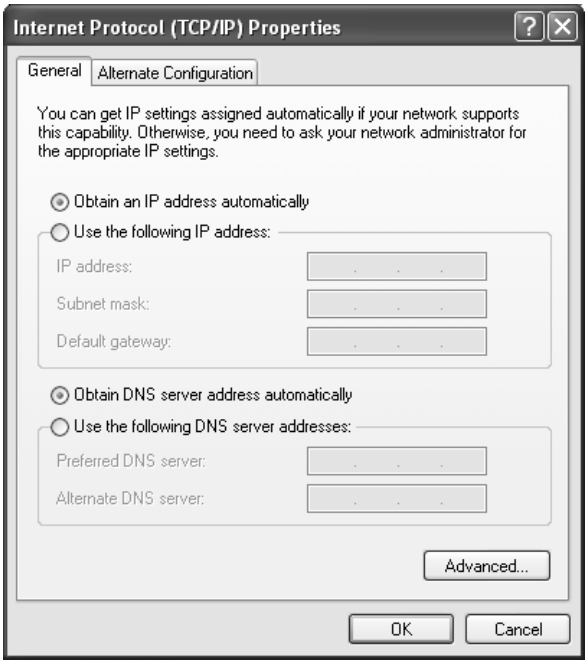
➞ Select ***Network and Internet Connections***, then click on the ***Network Connections*** icon.

➞ Double-click on the LAN connection with which you are connected to the Gigaset WLAN Repeater 108.



➞ Click on ***Properties***.

➞ Select ***Internet protocol (TCP/IP)*** and once again click on ***Properties***.


Internet Protocol (TCP/IP) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

➞ If the ***Obtain an IP address automatically*** and ***Obtain DNS server address automatically*** options have already been activated, your PC is already configured for DHCP. Click on ***Cancel*** and close the following windows with ***OK*** to save your network configuration.

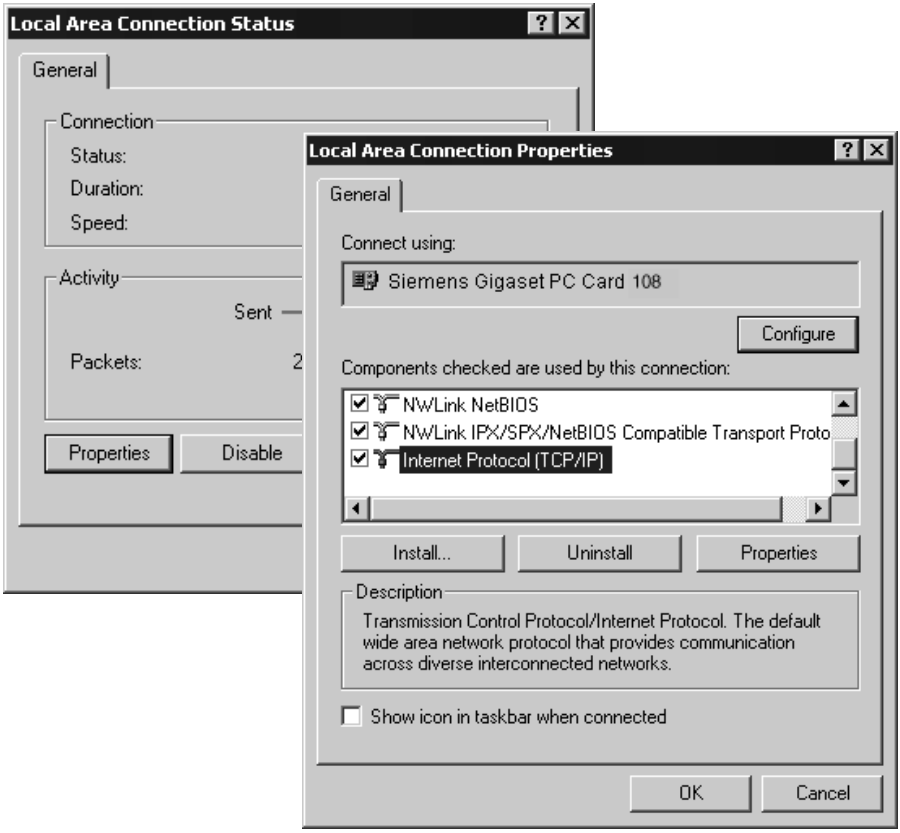
➞ If the ***Obtain an IP address automatically*** and ***Obtain DNS server address automatically*** have not been activated, select them and click on ***OK***. Close the following screens.

➞ Restart your network (see page 106).

Windows 2000

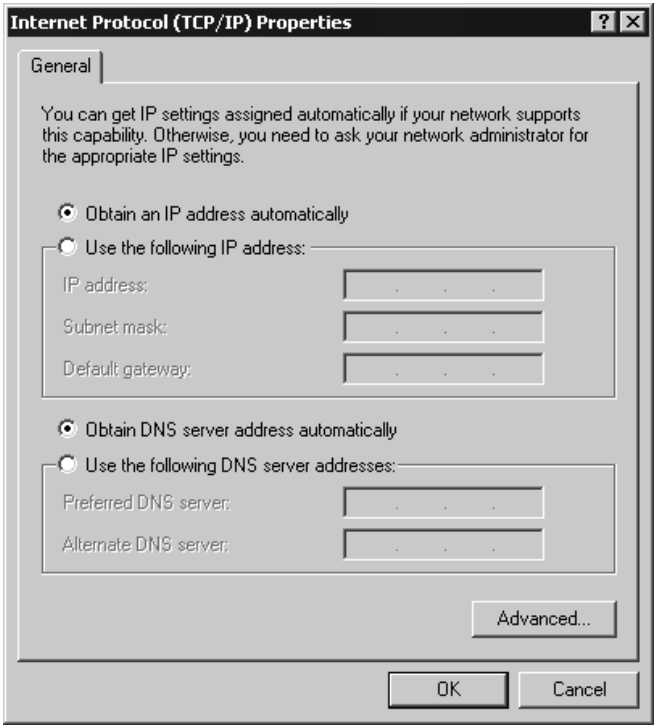
➔ Click on ***Start – Settings – Control Panel***.

➔ Double-click on the ***Network and Dial-up Connections*** icon and then on the icon of the network connection with which you are connected to the Gigaset WLAN Repeater 108.



➔ On the ***General*** tab, click on ***Properties***.

➔ Select ***Internet protocol (TCP/IP)*** and click on ***Properties***.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

➞ If the ***Obtain an IP address automatically*** and ***Obtain DNS server address automatically*** options have already been activated, your PC is already configured for DHCP. Click on ***Cancel*** and close the following windows with ***OK*** to save your network configuration.

➞ If the ***Obtain an IP address automatically*** and ***Obtain DNS server address automatically*** options have not been activated, select them and click on ***OK***. Close the following screens.

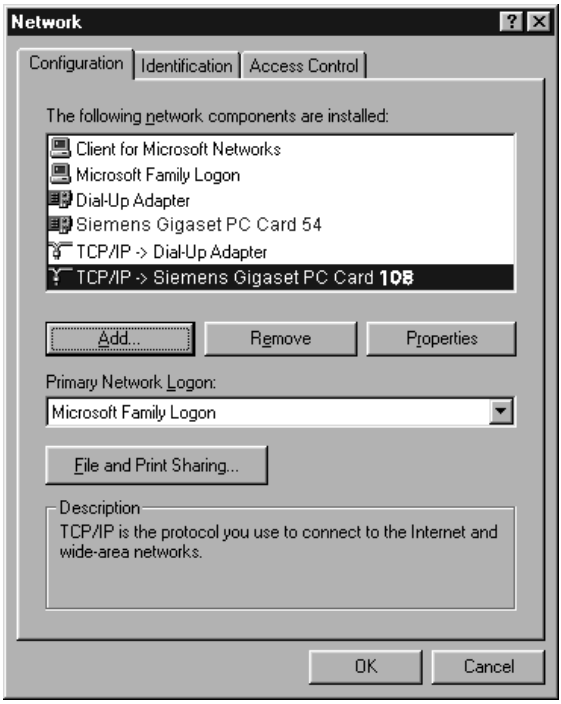
➞ Restart your network (see page 106).

Windows 98 SE/ME

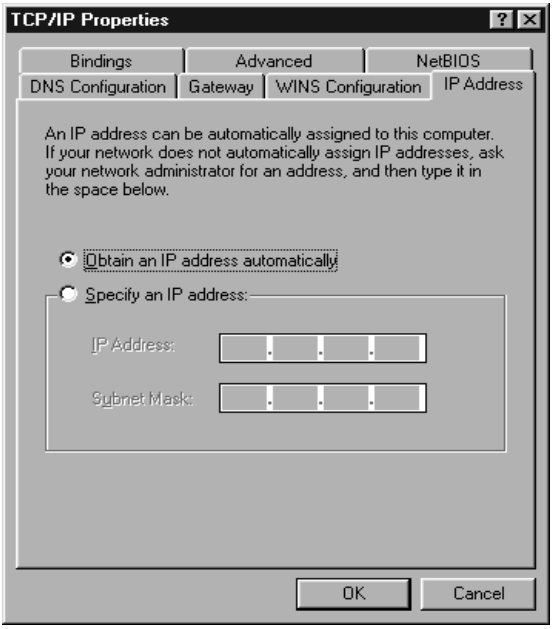
➔ Click on ***Start – Settings – Control Panel***.

➔ Double-click on the ***Network*** icon.

➞ In the next window, click on the TCP/IP entry for the network adapter you want to use to connect your Gigaset WLAN Repeater 108 with the network.



➞ Click on the ***Properties*** button. You can also double-click on the TCP/IP entry, as this automatically opens the ***Properties*** window.


TCP/IP Properties
Bindings
Advanced
NetBIOS
DNS Configuration
Gateway
WINS Configuration
IP Address
An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.
Obtain an IP address automatically
Specify an IP address:
IP Address:
Subnet Mask:
OK
Cancel

The ***IP address*** tab must look like the one above.
The ***Obtain an IP address automatically*** function field must be checked.
The fields under ***Specify an IP address*** must be empty.

➡ Click on ***OK***.

You will see a message telling you that the setting will not take effect until you restart your PC.

➡ Confirm this screen with ***OK***.

➡ This restarts your PC.

➡ Restart your network (see page 106).

Assigning static IP addresses

If you opted for automatic assignment of IP addresses during Windows installation, you can change this via the PC network configuration. If you want to use your Gigaset WLAN Repeater 108 as a network adapter, you will have to assign a static IP address. Otherwise, we recommend using automatically assigned IP addresses for the PCs in your network.

By default, the IP address of the Gigaset WLAN Repeater 108 is 192.168.2.254 and the subnet mask is 255.255.255.0. If you wish to use the static IP addresses outside the corresponding address block (192.168.2.1 to 192.168.2.253) in your network, you will also have to change the IP address of your Gigaset WLAN Repeater 108 accordingly.

Network configuration differs depending on the Windows operating system you are using. Below you will find a description for Windows XP, Windows 2000 and for Windows 98 SE/ME.

Private IP addresses

You can select your own private IP addresses for the PCs on your local network. We recommend using an address from a block that is reserved for private use. This is the address block:

192.168.0.1 – 192.168.255.254

Example:

PC 1: 192.168.15.1
PC 2: 192.168.15.2 etc.

Please note:

The subnet mask you use restricts the assignment of IP addresses. If, for example, you use subnet mask 255.255.255.0, this means the first three parts of the address must be identical for all network components (including the access point). With subnet mask 255.255.0.0 only the first two parts of the address must be identical. The following shows an example for subnet mask 255.255.255.0.

Correct is e.g.:

Access point address: 192.168.2.1
PC 1: 192.168.2.12
PC 2: 192.168.2.60 ...

Incorrect would be e.g.:

Access point address: 192.168.2.1
PC 1: 192.168.3.2
PC 2: 192.168.4.3

Windows XP

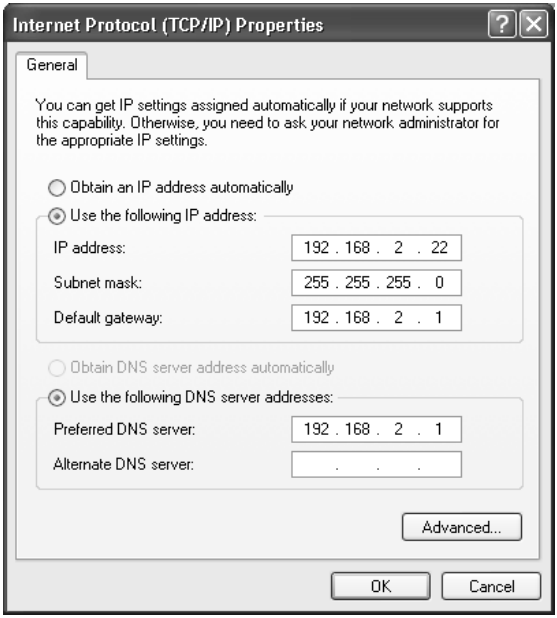
To set a static IP address for a PC:

➔ Click on ***Start – Control Panel***, select ***Network and Internet Connections*** and then click on the ***Network Connections*** icon.

➔ Double-click the LAN connection with which you are connected to the Gigaset WLAN Repeater 108.

➔ On the ***General*** tab, click on ***Properties***.

➔ Select ***Internet protocol (TCP/IP)*** and click on ***Properties***.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 192 . 168 . 2 . 22
Subnet mask: 255 . 255 . 255 . 0
Default gateway: 192 . 168 . 2 . 1
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server: 192 . 168 . 2 . 1
Alternate DNS server:
Advanced...
OK
Cancel

➔ Activate the option ***Use following IP address***.

➔ Enter the IP address for the PC in the ***IP address*** field. Please bear in mind the information on page 100.

➔ Enter the subnet mask in the ***Subnet mask*** field.

➔ Enter the IP address of the access point or the router in the ***Default gateway*** field (not the address of the Gigaset WLAN Repeater 108).

➔ Activate the option ***Use the following DNS server addresses***.

➔ Enter the IP address of the access point or the router in the ***Preferred DNS server*** field (not the address of the Gigaset WLAN Repeater 108).

➔ Click on ***OK*** or ***Close*** to close each window.

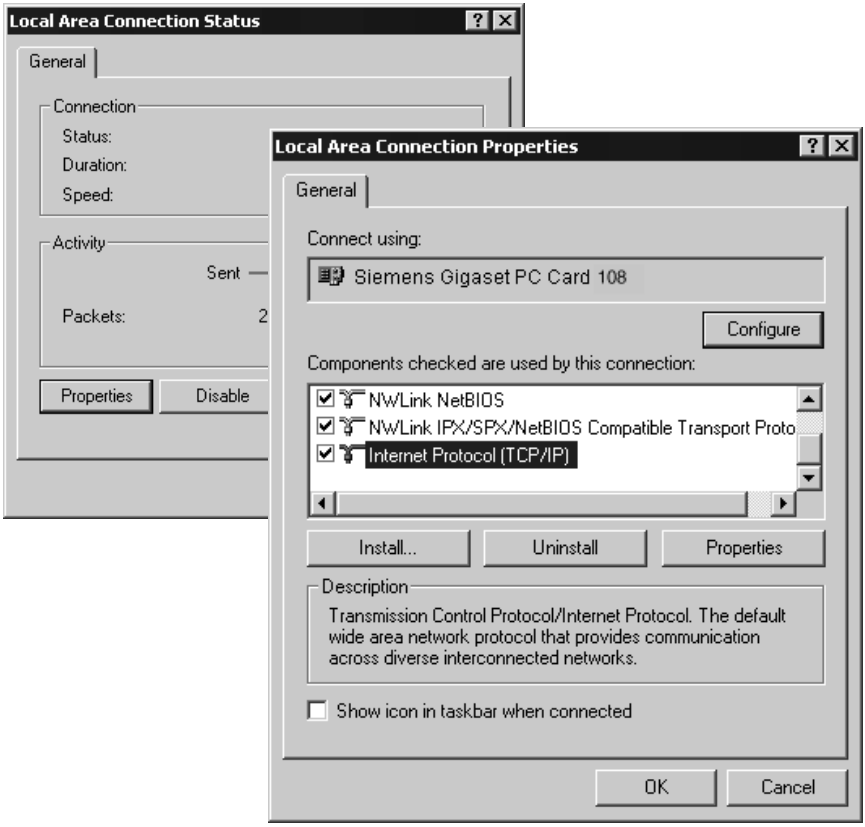
➔ Restart your network (see page 106).

Windows 2000

To set a static IP address for your PC:

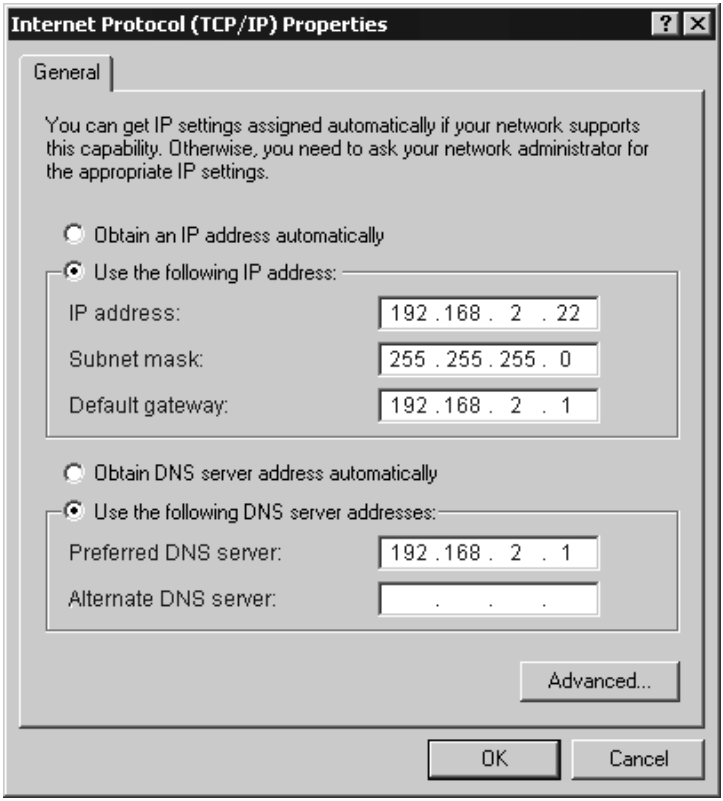
➞ Click on ***Start – Settings – Control Panel***.

➞ Double-click on the ***Network and Dial-up Connections*** icon and then on ***LAN Connection***.



➞ On the ***General*** tab, click on ***Properties***.

➞ Select ***Internet protocol (TCP/IP)*** and click on ***Properties***.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
192 . 168 . 2 . 22
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
192 . 168 . 2 . 1
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
192 . 168 . 2 . 1
Alternate DNS server:
Advanced...
OK
Cancel

➞ Activate the option ***Use following IP address***.

➞ Enter the IP address for the PC in the ***IP address*** field. Please bear in mind the information on page 100.

➞ Enter the subnet mask 255.255.255.0 in the ***Subnet mask*** field.

➞ Enter the IP address of the access point or the router in the ***Default gateway*** field (not the address of the Gigaset WLAN Repeater 108).

➞ Activate the option ***Use the following DNS server addresses***.

➞ Enter the IP address of the access point or the router in the ***Preferred DNS server*** field (not the address of the Gigaset WLAN Repeater 108).

➞ Close this and the next window with ***OK***.

➞ Restart your network (see page 106).

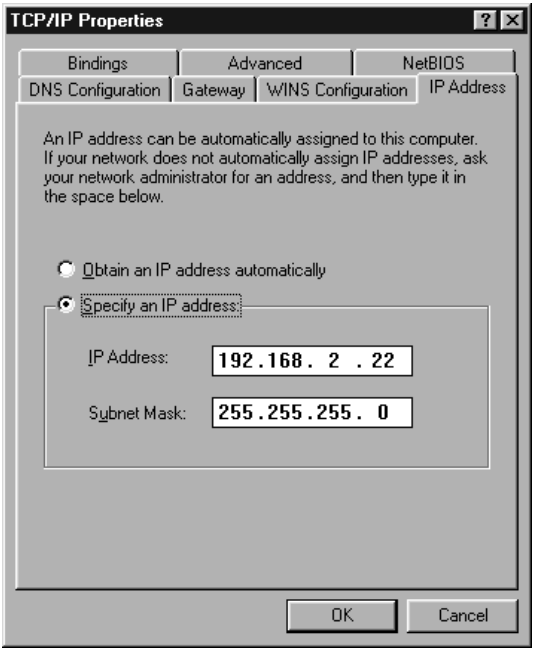
Windows 98 SE/ME

To set a static IP address for your PC:

➞ Start network configuration. To do this, select ***Start – Settings – Control Panel – Network***.

➞ In the ***Network*** window on the ***Configuration*** tab, select the TCP/IP option for your network card. Make sure you select the right TCP/IP entry if there are several in the selection list.

➞ Click on ***Properties***.

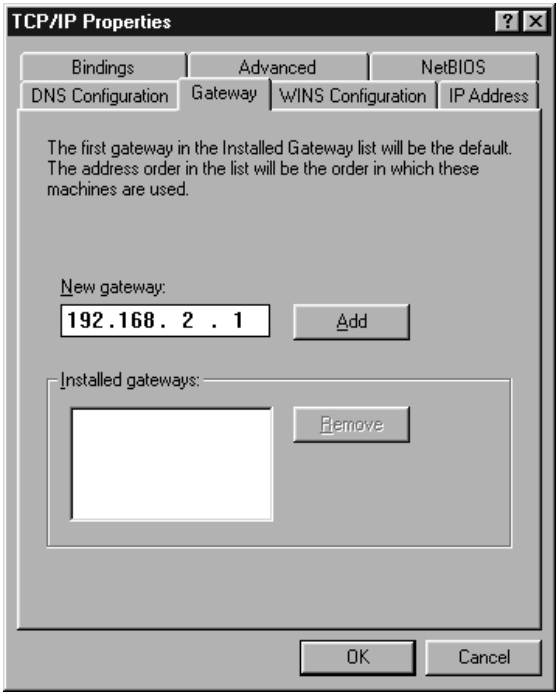


➞ Click on the ***IP address*** tab and select the option ***Set IP address***.

➞ Enter the IP address for the PC in the ***IP address*** field. Please bear in mind the information on page 100.

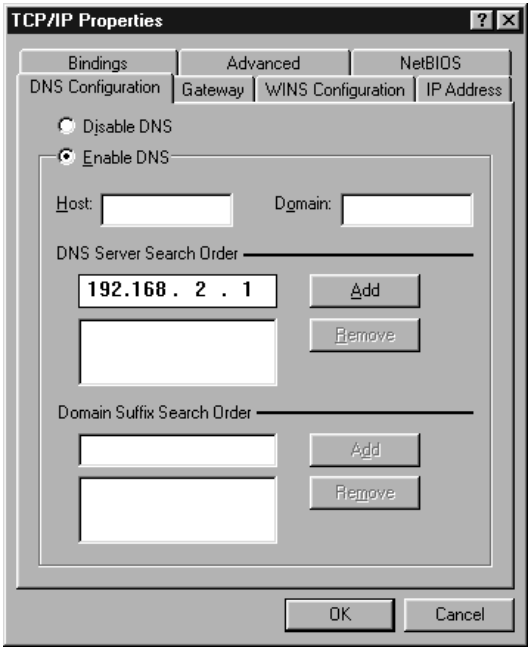
➞ Enter the subnet mask in the ***Subnet Mask*** field.

➞ Go to the ***Gateway*** tab.



➞ Enter the IP address of the access point or the router in the ***New gateway*** field (not the address of the Gigaset WLAN Repeater 108) and click on ***Add***.

➞ Open the ***DNS Configuration*** tab.



➞ Select ***Enable DNS.***

➞ Enter the IP address of the access point or the router under ***DNS Server Search Order*** (not the address of the Gigaset WLAN Repeater 108).

➞ Click on ***Add***.

➞ Click on ***OK*** twice to close the ***Network*** window.

➞ Restart the network (see below).

Restarting the network

➞ Restart your Gigaset WLAN Repeater 108 by disconnecting the mains plug and plugging it in again.

➞ Check that the Power LED on the front panel of the unit is on continuously.

➞ Reboot your PC.

You have now configured and opened a link between your PC and the Gigaset WLAN Repeater 108.

Updating IP addresses

Particularly in those cases in which you integrate your Gigaset WLAN Repeater 108 in an existing LAN that has already been configured, the Gigaset WLAN Repeater 108 DHCP server may not be able to access the addressing of the client PC. This means you cannot use this PC to access the configuration program.

This is mainly due to special settings in the Windows system registry. **Under no circumstances should you try to change them.**

You can update the addressing via the command prompt for the MS-DOS operating system.

Please note:

Use only the commands described below and make sure they are entered correctly. Otherwise you will not obtain the desired result. Some MS-DOS commands may even destroy the operating system!

Requirements:

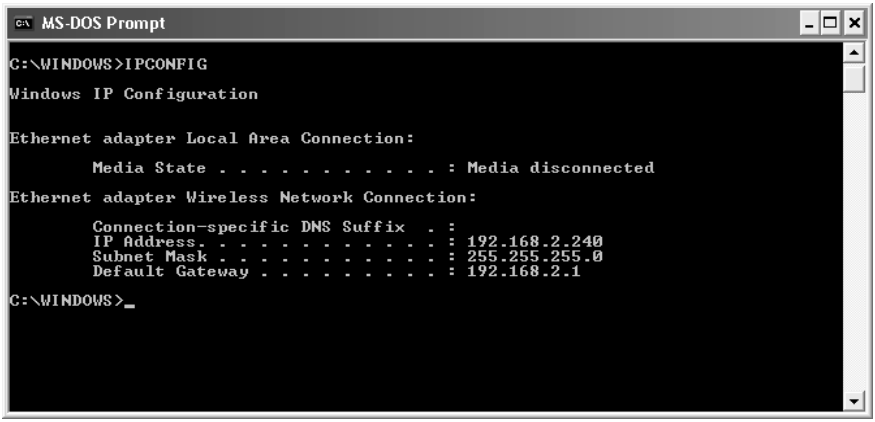
- Your PC is switched on and connected to the Gigaset WLAN Repeater 108.
- The PC network settings are set to obtaining an IP address automatically (see page 93).
- Your Gigaset WLAN Repeater 108 is connected, the Power and WLAN LEDs are on.

➡ Open the command prompt. As a rule, you will find this under ***Start*** – ***Program*** – ***Accessories*** – ***Command prompt***.

The DOS operating system interface is displayed in the window. As a rule, the mouse does not work in this operating system. You will have to carry out all the functions through manual entry and pressing the ENTER key. The prompt is already in the right position and is flashing.

➞ Enter the command **IPCONFIG** and press the ENTER key.

After a few moments, the configuration of all your network adapters will be displayed. Frequently there is only one. If there is more than one, note the name of the card that is responsible for the connection to the LAN.


MS-DOS Prompt
C:\WINDOWS>IPCONFIG
Windows IP Configuration
Ethernet adapter Local Area Connection:
Media State . . . . . : Media disconnected
Ethernet adapter Wireless Network Connection:
Connection-specific DNS Suffix . :
IP Address. . . . . : 192.168.2.240
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.2.1
C:\WINDOWS>

The address in the Default gateway line is important. This must contain the IP address of the Gigaset WLAN Repeater 108.

➞ When prompted, enter the command **IPCONFIG /RELEASE** and then the name of the network adapter that is to be given the correct IP address, in this example **"Wireless network connection"**.

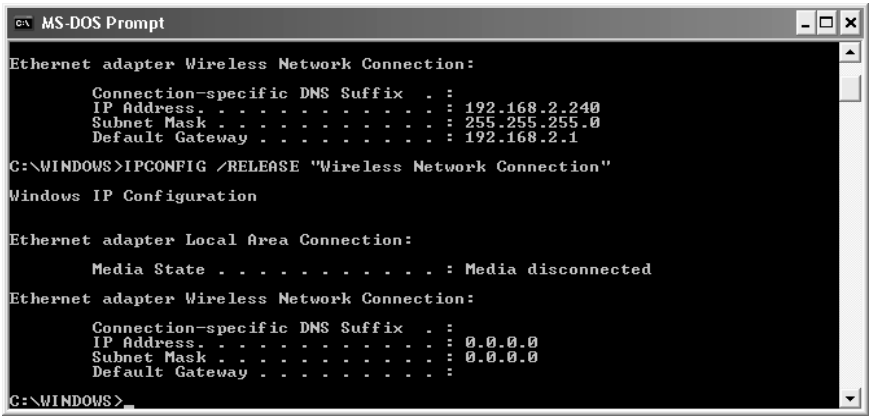
Example: **IPCONFIG /RELEASE "Wireless network connection"**

You must include the quotation marks if the name contains a space. You can also specify the name with a wildcard (joker).

Example: **IPCONFIG /RELEASE Wire***

This command will affect all the network cards whose name starts with **Wire**.

➞ Press the ENTER key.

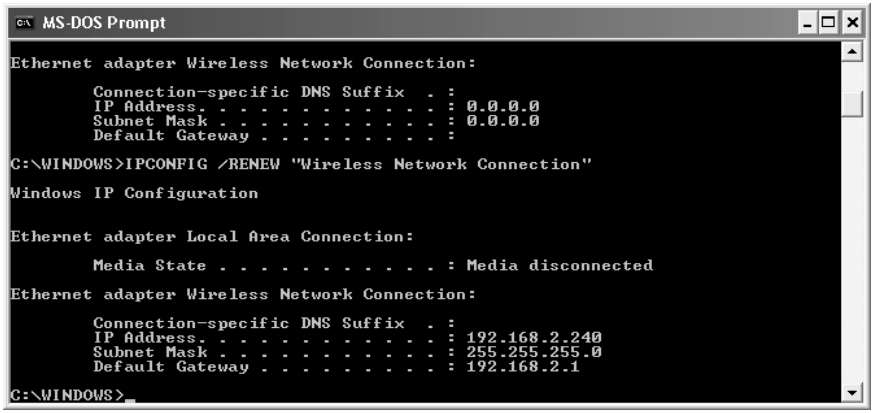

MS-DOS Prompt
Ethernet adapter Wireless Network Connection:
Connection-specific DNS Suffix . :
IP Address. . . . . : 192.168.2.240
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.2.1
C:\WINDOWS>IPCONFIG /RELEASE "Wireless Network Connection"
Windows IP Configuration
Ethernet adapter Local Area Connection:
Media State . . . . . : Media disconnected
Ethernet adapter Wireless Network Connection:
Connection-specific DNS Suffix . :
IP Address. . . . . : 0.0.0.0
Subnet Mask . . . . . : 0.0.0.0
Default Gateway . . . . . :
C:\WINDOWS>

This cancels all IP address assignments.

➞ At the prompt, enter the command **IPCONFIG /RENEW** and then the name of the network adapter that is to be given the correct IP address, in this example "Wireless network connection".

➞ Example: **IPCONFIG /RENEW "Wireless network connection"**

➞ Press the ENTER key.


MS-DOS Prompt
Ethernet adapter Wireless Network Connection:
Connection-specific DNS Suffix . :
IP Address. . . . . : 0.0.0.0
Subnet Mask . . . . . : 0.0.0.0
Default Gateway . . . . . :
C:\WINDOWS>IPCONFIG /RENEW "Wireless Network Connection"
Windows IP Configuration
Ethernet adapter Local Area Connection:
Media State . . . . . : Media disconnected
Ethernet adapter Wireless Network Connection:
Connection-specific DNS Suffix . :
IP Address. . . . . : 192.168.2.240
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.2.1
C:\WINDOWS>

IP addresses are now assigned. Independently of the settings under Windows, the PC now recognises the gateway address of the Gigaset WLAN Repeater 108 and inserts it as the default address.

➔ At the prompt now enter **EXIT**. This closes the DOS window. The PC now returns to the Windows Desktop.

➔ Continue as described in Chapter "The user interface" on page 15.

Please note:

It may be the case that other PCs in your network cannot be reached via the DHCP server for the same reasons. In such cases, you will have to carry out the steps described above on these PCs as well.

Trouble shooting

If your device does not function as it should, use the following table to try to remedy the problem.

Additional solutions to problems are already available on our Customer Care page. Visit our Service page at www.siemens.com/gigasetcustomercare.

Problem	Possible cause	Remedy
No LED lights up on the front panel.	The device is not correctly connected to the mains power supply.	➡ Check whether the mains adapter plug is properly inserted in the device. ➡ Check whether the socket in which the mains adapter is plugged is live. This can be done using a device that you know works properly, e.g. a desk lamp.
The LED for the Gigaset WLAN Repeater 108 LAN socket does not light up.	You do not have any devices connected.	➡ Connect a device using the LAN cable supplied.
	The device has not been properly connected.	➡ Make sure that the LAN cable connectors sit firmly in the correct connection sockets on both the Gigaset WLAN Repeater 108 and the connected terminal.
	Your Gigaset WLAN Repeater 108 is not connected to the mains power supply or is not ready for use.	➡ Check whether the Power LED on your Gigaset WLAN Repeater 108 is continuously lit and, if appropriate, restart your Gigaset WLAN Repeater 108 by briefly disconnecting it from the mains power supply.
	The connected device is not switched on or not ready for use.	➡ Check the status of the connected device and, if appropriate, restart it.
	You are not using the correct cable or the cable is damaged.	➡ Connect the device with the supplied cable or an Ethernet or Crossover cable, category 5 or higher. Try replacing the cable with one of the same type. ISDN cables or other cables with RJ45 connectors are not suitable for the connection.

Problem	Possible cause	Remedy
You cannot access the Gigaset WLAN Repeater 108 from a PC, for example to call the configuration program (connection via LAN cable).	The connection between PC and the Gigaset WLAN Repeater 108 is interrupted. The LED for the LAN socket does not light up.	➡ Check the cable connection (see above).
	The PC's network settings are wrong.	➡ Make sure that the PC has the right configuration for connecting to the Gigaset WLAN Repeater 108, for example that the IP address and subnet mask have been set correctly or the obtaining the IP address automatically has been activated (see page 93).
	Your PC is configured to automatically obtain IP addresses, but the DHCP server of your Gigaset WLAN Repeater has been switched off.	➡ Manually assign a static IP address for your PC in the Gigaset WLAN Repeater 108 (see page 100) address block.
	The IP address of your Gigaset WLAN Repeater 108 has changed as you have activated the ***Obtained automatically*** option (see page 47).	➡ Check the log of your DHCP server, from which the Gigaset WLAN Repeater 108 obtained its IP address, to see which IP address was assigned to it and enter this address in your browser. Try resetting your Gigaset WLAN Repeater 108 to the factory settings to once again obtain access via address 192.168.2.254 (see page 11).

Problem	Possible cause	Remedy
You cannot establish a wireless connection to the Gigaset WLAN Repeater 108.	You are outside the range of the device.	➔ Reduce the distance to the Gigaset WLAN Repeater 108. Align the aerials of the devices involved in transmission for the best possible range.
	You have deactivated the ***SSID broadcast*** option which means that the Gigaset WLAN Repeater 108 does not appear in the network overview.	➔ Manually enter the SSID of the Gigaset WLAN Repeater 108 for your wireless network adapter to set up the connection.
	Encryption of the transmitted data has been activated on your Gigaset WLAN Repeater 108 (WEP / WPA).	➔ Apply the encryption settings to your wireless network adapter as well.
	The MAC filter on your Gigaset WLAN Repeater 108 has been activated, but your PC's MAC address has not been entered (Operating Mode Access point).	➔ From another PC, enter the relevant MAC address in the table to permit access (see page 61). Try using an Ethernet cable to connect a PC to the Gigaset WLAN Repeater 108.

Problem	Possible cause	Remedy
You cannot access the Gigaset WLAN Repeater 108 from a PC, for example to call the configuration program (wireless connection via WLAN).	You are not connected to the Gigaset WLAN Repeater 108.	➡ Make sure you are properly connected to the Gigaset WLAN Repeater 108. Check the parameters in the Gigaset WLAN Adapter Monitor.
	The PC's network settings are wrong.	➡ Make sure that the PC has the right configuration for connecting to the Gigaset WLAN Repeater 108, for example that the IP address and subnet mask have been set correctly or the obtaining the IP address automatically has been activated (see page 93).
	Your PC is configured for the automatic obtaining of IP addresses, but the DHCP server of your Gigaset WLAN Repeater 108 has been switched off.	➡ Manually assign a static IP address for your PC in your Gigaset WLAN Repeater 108 address block (see page 100).
	The IP address of your Gigaset WLAN Repeater 108 has changed as you have activated the ***Obtained automatically*** option (see page 47).	➡ Check the log of your DHCP server, from which the Gigaset WLAN Repeater 108 obtained its IP address, to see which IP address was assigned to it and enter this address in your browser. Try resetting your Gigaset WLAN Repeater 108 to the factory settings to once again obtain access via address 192.168.2.254 (see page 11).
The Gigaset WLAN Repeater 108 does not work properly in Repeater Operating Mode.	The repeater function on the Gigaset WLAN Repeater 108 or on the access point is not activated.	➡ Make sure that the repeater function has been activated on both your Gigaset WLAN Repeater 108 and your access point (see page 47) or read the corresponding chapter in your access point's manual).

Problem	Possible cause	Remedy
	The repeater configuration of the Gigaset WLAN Repeater 108 or your access point is wrong.	➡ Make sure that the correct access point has been selected on your Gigaset WLAN Repeater 108 and the correct Gigaset WLAN Repeater 108 on your access point (see page 47) or read the corresponding chapter in your access point's manual). Make sure that you use the MAC address to identify the devices when there several devices with the same SSID.
	The radio channel of the Gigaset WLAN Repeater 108 does not correspond to the radio channel of the access point.	➡ Make sure that the radio channels on the devices are the same (see page 51) or read the corresponding chapter in your access point's manual).
You notice that unauthorised persons have accessed your data/computers.	The security precautions are inadequate.	➡ Boost your security precautions. To find out how to do this, please read Chapter "Local Network" on page 47.
Some steps are not appropriate, the problem still exists.	New firmware may be available for the Gigaset WLAN Repeater	➡ Download the new firmware from the Gigaset WLAN Repeater 108 product page on our web page and load it onto your device (see page 69).

Specifications

Interfaces	
LAN	RJ45, 10Base-T/100Base-TX, Autosensing, MDI/MDIX
WLAN	802.11g, for the wireless connection of up to 252 PCs
Wireless properties	
Frequency range	2,400 to 2,484 GHz ISM band
Spreading	Direct Sequence Spread Spectrum (DSSS)
Modulation	CCK, OFDM
Number of channels	IEEE 802.11b: 13 (Europe, ETSI) IEEE 802.11g: 13 (Europe, ETSI)
Transmission rate	IEEE 802,11b: 1, 2, 5.5, 11 Mbps IEEE 802.11g: 12, 18, 24, 36, 48, 54 Mbps Super G: 72, 96, 108 Mbps XR: 0.25, 0.5, 1 Mbps
Range	approx. 30 m indoors, up to 300 m outdoors
Operating environment	
Temperature	Operating temperature 0 to 40 °C
	Storage temperature -10 to 70 °C
Humidity	5% to 80% (non condensing)
LED displays	WLAN (activity, wireless) LAN (connection to PC, activity, wired) Power
Compliance with security conditions and regulations	
	CE, EN60950
Software	Browser-based configuration environment Security setup MAC address filtering Log file WEP encryption WPA2/WPA encryption

Approval

This device is intended for use within the European Union and Switzerland. If used in other countries, it must first be approved nationally in the country in question.

Country-specific requirements have been taken into consideration.

We, Siemens Home and Office Communication Devices GmbH & Co. KG, declare that this device meets the essential requirements and other relevant regulations laid down in Directive 1999/5/EC.

A copy of the 1999/5/EC Declaration of Conformity is available online at: http://www.siemens.com/gigasetdocs.

CE 0682 ⓘ

Disposal

United Kingdom

All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
This crossed-out wheeled bin symbol on the product means the product is covered by the European Directive 2002/96/EC.
The correct disposal and separate collection of your old appliance will help prevent potential negative consequences for the environment and human health. It is a precondition for reuse and recycling of used electrical and electronic equipment.
For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

Ireland

All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.

This crossed-out wheeled bin symbol on the product means the product is covered by the European Directive 2002/96/EC.

The correct disposal and separate collection of your old appliance will help prevent potential negative consequences for the environment and human health. It is a precondition for reuse and recycling of used electrical and electronic equipment.

For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

Sverige

Alla elektriska apparater ska avfallshanteras separat från vanligt hushållsavfall på för ändamålet avsedda platser.

Om en symbol med en överstruken soptunna finns på en produkt gäller direktiv 2002/96/EC för produkten.

Korrekt avfallshantering och separat insamling av förbrukade apparater förebygger potentiella skador på miljö och hälsa. Dessutom är det en förutsättning för återanvändning och återvinning av förbrukade elektriska apparater.

Utförlig information om avfallshantering av förbrukade apparater finns hos din kommun, avfallshanteringstjänst eller hos fackhandlaren där du köpte produkten.

Suomi

Hävitä käytetyt sähkö- ja elektroniikkalaitteet viemällä ne paikallisten viranomaisten järjestämiin asianomaisiin erilliskeräyspisteisiin. Älä laita niitä sekajätteeseen.

Kuvatunnus, jossa pyörillä varustetun jäteastian yli on vedetty risti, osoittaa, että tuote on Euroopan unionin direktiivin 2002/96/EY (WEEE) mukainen.

Käytettyjen laitteiden asianmukainen hävittäminen ja erilliskeräys vähentävät ympäristölle ja terveydelle aiheutuvia haittoja. Tämä on käytettyjen sähkö- ja elektroniikkalaitteiden uudelleenkäytön ja kierrätyksen edellytys.

Lisätietoja käytetyn laitteen hävittämisestä saat paikallisilta viranomaisilta, jätehuoltoyhtiöiltä tai laitetta myyvästä liikkeestä.

Danmark

Alle elektriske og elektroniske produkter skal bortskaffes separat fra det kommunale husholdningsrenovationssystem via særskilte indsamlingssystemer f.eks. på genbrugsstationerne.

Symbolet med affaldsspanden med et kryds over på produktet betyder, at produktet er omfattet af EU-direktiv 2002/96/EF.

Korrekt bortskaffelse og separat indsamling af dit gamle apparat vil bidrage til at undgå potentielt negative konsekvenser for miljøet og for den menneskelige sundhed. Det er en forudsætning for genbrug og genanvendelse af brugt elektrisk og elektronisk udstyr.

Yderligere oplysninger om bortskaffelse af dit gamle apparat kan du få hos kommunalforvaltningen, renovationsselskabet eller i den butik, hvor du har købt produktet.

Customer service (Customer Care)

- You have access to straightforward support concerning technical aspects of your device and how to operate it through our Online Support on the Internet:

  www.siemens.com/gigasetcustomercare

  It provides you with 24/7 support for all our products. It also provides interactive troubleshooting, a list of FAQs and answers plus user guides and current software updates for you to download.

  You will also find frequently asked questions and answers in this user guide and in the document "Gigaset WLAN. Practical tips" on the included CD.

- For fast and dependable assistance with any repairs or guarantee/warranty claims, contact our **Service Centres** in:

United Kingdom	0 87 05 33 44 11
Ireland	18 50 77 72 77
Sverige	08-7509911
Finland	09 22 94 37 00
Norge	22 70 84 00
Danmark	35 25 86 00

Please have your proof of purchase ready when calling.

Replacement or repair services are not offered in countries where our product is not sold by authorised dealers.

Please address any questions about the DSL or cable connection to your network provider.

Guarantee Certificate United Kingdom

Without prejudice to any claim the user (customer) may have in relation to the dealer or retailer, the customer shall be granted a manufacturer's Guarantee under the conditions set out below:

- In the case of new devices and their components exhibiting defects resulting from manufacturing and/or material faults within 24 months of purchase, Siemens shall, at its own option and free of charge, either replace the device with another device reflecting the current state of the art, or repair the said device. In respect of parts subject to wear and tear (including but not limited to, batteries, keypads, casing), this warranty shall be valid for six months from the date of purchase.
- This Guarantee shall be invalid if the device defect is attributable to improper treatment and/or failure to comply with information contained in the user manuals.
- This Guarantee shall not apply to or extend to services performed by the authorised dealer or the customer themselves (e. g. installation, configuration, software downloads). User manuals and any software supplied on a separate data medium shall be excluded from the Guarantee.
- The purchase receipt, together with the date of purchase, shall be required as evidence for invoking the Guarantee. Claims under the Guarantee must be submitted within two months of the Guarantee default becoming evident.
- Ownership of devices or components replaced by and returned to Siemens shall vest in Siemens.
- This Guarantee shall apply to new devices purchased in the European Union. For Products sold in the United Kingdom the Guarantee is issued by: Siemens Home and Office Communication Devices GmbH & Co. KG, Schlavenhorst 66, D-46395 Bocholt, Germany.
- Any other claims resulting out of or in connection with the device shall be excluded from this Guarantee. Nothing in this Guarantee shall attempt to limit or exclude a Customers Statutory Rights, nor the manufacturer's liability for death or personal injury resulting from its negligence.
- The duration of the Guarantee shall not be extended by services rendered under the terms of the Guarantee.
- Insofar as no Guarantee default exists, Siemens reserves the right to charge the customer for replacement or repair.
- The above provisions does not imply a change in the burden of proof to the detriment of the customer.

To invoke this Guarantee, please contact the Siemens telephone service. The relevant number is to be found in the accompanying user guide.

Guarantee Certificate Ireland

Without prejudice to any claim the user (customer) may have in relation to the dealer or retailer, the customer shall be granted a manufacturer's Guarantee under the conditions set out below:

- In the case of new devices and their components exhibiting defects resulting from manufacturing and/or material faults within 24 months of purchase, Siemens shall, at its own option and free of charge, either replace the device with another device reflecting the current state of the art, or repair the said device. In respect of parts subject to wear and tear (including but not limited to, batteries, keypads, casing), this warranty shall be valid for six months from the date of purchase.
- This Guarantee shall be invalid if the device defect is attributable to improper care or use and/or failure to comply with information contained in the user manuals. In particular claims under the Guarantee cannot be made if:
- The device is opened (this is classed as third party intervention)
- Repairs or other work done by persons not authorised by Siemens.
- Components on the printed circuit board are manipulated
- The software is manipulated
- Defects or damage caused by dropping, breaking, lightning or ingress of moisture. This also applies if defects or damage was caused by mechanical, chemical, radio interference or thermal factors (e.g.: microwave, sauna etc.)
- Devices fitted with accessories not authorised by Siemens
- This Guarantee shall not apply to or extend to services performed by the authorised dealer or the customer themselves (e.g. installation, configuration, software downloads). User manuals and any software supplied on a separate data medium shall be excluded from the Guarantee.
- The purchase receipt, together with the date of purchase, shall be required as evidence for invoking the Guarantee. Claims under the Guarantee must be submitted within two months of the Guarantee default becoming evident.
- Ownership of devices or components replaced by and returned to Siemens shall vest in Siemens.
- This Guarantee shall apply to new devices purchased in the European Union. For Products sold in the Republic of Ireland the Guarantee is issued by Siemens Home and Office Communication Devices GmbH & Co. KG, Schlavenhorst 66, D-46395 Bocholt, Germany.
- Any other claims resulting out of or in connection with the device shall be excluded from this Guarantee. Nothing in this Guarantee shall attempt to limit or exclude a Customers Statutory Rights, nor the manufacturer's liability for death or personal injury resulting from its negligence.
- The duration of the Guarantee shall not be extended by services rendered under the terms of the Guarantee.
- Insofar as no Guarantee default exists, Siemens reserves the right to charge the customer for replacement or repair.

- The above provisions does not imply a change in the burden of proof to the detriment of the customer.

To invoke this Guarantee, please contact the Siemens helpdesk on 1850 777 277. This number is also to be found in the accompanying user guide.

Tillverkarens garanti Sverige

Användaren skall beviljas garanti av tillverkaren, utan att återförsäljarens skyldigheter därmed påverkas, enligt de villkor som anges nedan:

- Om nya enheter och tillhörande komponenter uppvisar defekter, som är ett resultat av tillverknings- och/eller materialfel, inom 24 månader efter köpet skall Siemens, efter eget gott-finnande och utan kostnad, antingen ersätta enheten med en likvärdig enhet som motsvarar enhetens aktuella utförande, eller reparera den aktuella enheten. Delar som utsätts för normalt slitage (t.ex. batterier, knappsats, hölje) omfattas av garantin under sex månader från inköpsdatum.
- Garantin gäller inte om felet på utrustningen har orsakats av felaktig användning, eller underlåtande att följa den information som finns i användarhandboken.
- Garantin omfattar inte tjänster som utförs av auktoriserade återförsäljare eller kunden själv (t.ex. installation, konfiguration, nerladdning av programvara). Användarhandböcker och sådan programvara som medföljer på ett separat datamedium omfattas inte heller av garantin.
- Inköpskvitto där inköpsdatum framgår skall uppvisas vid garantianspråk. Garantianspråk skall göras inom två månader från det datum då fel som omfattas av garantin upptäcks.
- Äganderätten till enheter eller komponenter som ersatts och returnerats till Siemens skall övergå till Siemens.
- Garantin gäller nya enheter som köpts inom den Europeiska unionen. För enheter köpta i Sverige utfärdas garantin av Siemens Home & Office Communication Devices AB, Röntgenvägen 2, 171 95 Solna, Sverige.
- Garantianspråk som skiljer sig från eller som sträcker sig utöver anspråk som anges i denna garanti är inte giltiga. Siemens är inte ansvarigt för driftstörningar, förlorad vinst eller förlust av data, ytterligare programvara eller annan information som laddats ned av kunden.
- Om skadan inte omfattas av garantin, förbehåller sig Siemens rätten att fakturera kunden för ersättningsprodukten eller reparationen.
- Ovanstående villkor innebär ingen förändring av bevisbördan till kundens nackdel.

För att framställa garantianspråk ber vi dig kontakta Siemens telefonservice. Aktuellt telefonnummer återfinns i den medföljande användarhandboken.

Takuuehdot Suomi

Tämä takuu ei rajoita niitä oikeuksia, joita laitteen käyttäjällä (ostajalla) on jälleenmyyjää kohtaan. Valmistaja myöntää laitteelle ja niiden osille seuraavien takuuehtojen mukaisen takuun:

- Siemens vastaa uusissa laitteissa ja niiden osissa ilmenevistä materiaali- ja valmistusvirheistä kahden vuoden ajan kuitissa näkyvästä ostopäivämäärästä lukien. Takuun perusteella Siemens valintansa mukaan joko korjaa viallisen laitteen tai vaihtaa sen vastaavan tuotteeseen. Kuluvien osien (esim. akut, näppäimistö, kuoret, kuorten pienet osat) takuu on voimassa kuusi kuukautta ostopäivästä lukien.
- Takuun piiriin eivät kuulu tuotteen käyttäjän huolimattomuudesta ja/tai käyttöohjeiden noudattamisen laiminlyönnistä aiheutuneet viat.
- Takuun piiriin eivät kuulu myöskään valtuutettujen jälleenmyyjien tai käyttäjän itsensä suorittamat työt (esim. asennus, määritysten asettaminen, ohjelmien lataus). Takuu ei kata käyttöohjeita tai erikseen toimitettuja ohjelmia.
- Ostopäivämäärän sisältävä ostokuitti on esitettävä takuuvaatimuksen yhteydessä. Takuuvaatimus on esitettävä kahden kuukauden kuluessa siitä, kun takuuehtojen mukainen virhe on havaittu.
- Siemensin vaihtamat ja Siemensille palautetut laitteet ja osat ovat Siemensin omaisuutta.
- Tämä takuu koskee uusia laitteita, jotka on ostettu ja joita käytetään Euroopan Unionin alueella. Siemens Home and Office Communication Devices GmbH & Co. KG, Schlavenhorst 66, D-46395 Bocholt, Germany, Suomi myöntää tämän takuun Suomesta ostetuille tuotteille.
- Tämän takuun perusteella ostajalla ei ole oikeutta esittää muita kuin edellä mainittuja vaatimuksia Siemensiä kohtaan. Takuu ei kuitenkaan miltään osin sulje pois tai rajoita ostajan kuluttajansuojalain tai tuotevastuulain mukaisia oikeuksia.
- Takuuehtojen mukaiset vaihto- ja korjauspalvelut eivät pidennä takuuaikaa.
- Jos laitteessa ei havaita näiden takuuehtojen mukaista virhettä, Siemensillä on oikeus veloittaa ostajalta laitteen vaihto- tai korjauskulut.

Laitteen vikatapauksessa pyydämme teitä ottamaan yhteyttä ensisijaisesti jälleenmyyjäänne.

Takuuta koskevissa asioissa kannattaa ottaa yhteyttä Siemensin asiakaspalveluun. Asiakaspalvelun puhelinnumero löytyy tuotteen mukana toimitettavista käyttöohjeista.

Tillverkarens garanti Finland

Denna garanti begränsar inte de rättigheter som användaren (köparen) av enheten har gentemot återförsäljaren. Tillverkaren beviljar garanti för enheten och dess komponenter enligt följande garantivillkor:

- Siemens ansvarar för fel i material och utförande som uppstår i nya enheter och tillhörande komponenter under två år efter det inköpsdatum som framgår av kvittot. Beroende på garantin kan Siemens välja att antingen reparera den felaktiga enheten eller ersätta den med en likvärdig produkt. Delar som utsatts för normalt slitage (t.ex. batterier, knappsats, hölje) omfattas av garantin under tolv månader efter inköpsdatum.
- Garantin gäller inte om felet på utrustningen uppstått pga. av felaktig användning av utrustningen och/eller underlåtenhet att följa bruksanvisningarna.
- Garantin omfattar inte heller arbeten som utförts av auktoriserade återförsäljare eller av användaren själv (t.ex. installation, konfiguration, nerladdning av programvara). Garantin omfattar inte bruksanvisningar eller programvara som levererats separat.
- Inköpskvitto där inköpsdatum framgår skall uppvisas i samband med garantianspråk. Garantianspråk skall göras inom två månader från det datum då fel som omfattas av garantin upptäcks.
- Äganderätten till enheter och komponenter som ersatts och returnerats till Siemens övergår till Siemens.
- Denna garanti gäller nya enheter som köpts och som används inom den Europeiska Unionen. För enheter köpta i Finland utfärdas garantin av Siemens Home and Office Communication Devices GmbH & Co. KG, Schlavenhorst 66, D-46395 Bocholt, Germany.
- Garantianspråk som skiljer sig från de anspråk som anges i denna garanti kan inte ställas på Siemens. Garantin utesluter eller begränsar dock inte de rätttigheter som köparen har enligt konsumentskyddslagstiftning eller produktansvarslagstiftning.
- Garantivillkorens bytes- och reparationstjänster förlänger inte garantitiden.
- Om man inte hittar de fel som nämns i garantivillkoren i utrustningens, förbehåller sig Siemens rätten att fakturera köparen för ersättningsprodukten eller reparationen.
- I händelse av fel i utrustningen ber vi er först kontakta återförsäljaren.

I ärenden som berör garanti lönar det sig att kontakta Siemens kundtjänst. Telefonnumret till kundtjänst finns i den medföljande bruksanvisningen.

Garanti Norge

Gyldighet

Denne apparatgarantien gjelder for sluttbrukeren («Kunden»). Kundens lovfestede krav overfor forhandler/selger blir ikke ugyldiggjort eller begrenset av denne garantien.

- Garantien omfatter de leverte apparatene med alle tilhørende deler, men ikke installasjon, konfigurasjon og tjenester som er utført av forhandler. Håndbøker og evt. programvare på separate datamedier omfattes ikke av garantien. Denne garantien gjelder ikke for dekorerte deksler eller andre personaliserte deler eller programvare som ikke var en del av den opprinnelige leveransen. Garantien gjelder heller ikke for dekorerte over- eller underdeksler fra spesialserier.
- Garantien oppfylles ved at apparater eller deler som på grunn av fabrikasjons- og/eller materialfeil er blitt defekte, byttes ut eller repareres, alt etter hva vi finner mest hensiktsmessig. Det er en forutsetning at apparatet/delene er behandlet på riktig måte og at bruksanvisningen er fulgt. Garantien gjelder ikke ved normal slitasje. Alternativt forbeholder vi oss retten til å bytte ut det defekte apparatet mot et nyere produkt.
- Det kan ikke fremsettes garantikrav dersom
  - Mangelen eller skaden er oppstått på grunn av ukyndig bruk.
    Som ukyndig bruk regnes blant annet følgende:
  - Åpning av apparatet (regnes som fremmed inngrep)
  - Manipulering av enkeltkomponenter i komponentgruppen
  - Manipulering av programvaren
  - Mangler eller skader som er oppstått på grunn av fall, brudd, lynnedslag eller spilt væske. Dette omfatter også skader som er forårsaket av mekaniske, kjemiske, radiotekniske og termiske forhold (f. eks. mikrobølgeovn, badstu osv.).
  - Reparasjoner eller inngrep som er foretatt av personer som ikke er autorisert av oss.
  - Apparater som er utstyrt med ekstrautstyr eller tilbehør som ikke er godkjent av Siemens.
- Garantikrav må fremsettes umiddelbart etter at en feil/mangel er påvist.
- Som garantibevis må kvittering eller kjøpsbevis kunne fremlegges. All garanti/reklamasjonskrav mottas med det uttrykkelige forbehold at det ved en senere kontroll kan bekreftes at garantibetingelsene er oppfylt.
- Eiendomsretten til utskiftede apparater og deler tilhører oss.
- Kostnadene for materialer og arbeidstid bæres av oss.
- Vi er berettiget til å foreta tekniske endringer etter eget forgodtbefinnende for å oppgradere apparatet til gjeldende tekniske stand. Kostnadene ved dette blir ikke belastet kunden. Kunden har ingen rettslige krav på dette.
- Garantien gjelder i landet der apparatet ble kjøpt. Garantien kommer kun til anvendelse dersom apparatet blir brukt i det geografiske området som er angitt på emballasjen og i bruksanvisningen.

Det kan ikke fremsettes ytterligere krav av noen art. Siemens påtar seg ikke i noe tilfelle ansvar for driftsavbrudd, tapt fortjeneste eller tap av data eller annen informasjon. Sikring av dette er utelukkende kundens ansvar.

Garantiperiode

- Lovfestede minimumsperioder for tilsvarende garantier vil alltid gå foran våre regler, men ikke mer enn 24 måneder.
- Garantiperioden begynner den datoen kunden kjøper apparatet.
- En utført garantiytelse medfører ikke at garantiperioden forlenges.
- Garantiytelser behandles over hele landet i våre kundeservicesentre.

Garantigiver er Siemens Home and Office Communication Devices GmbH & Co. KG, Schlavenhorst 66, D-46395 Bocholt, Germany.

Merk:

Ved innfrielse av garantien ber vi deg kontakte ditt nærmeste «Kundeservice (Customer Care)»

Producentens Garanti Danmark

Slutbrugeren ydes en af forhandleren uafhængig fabriksgaranti på nedenstående vilkår:

- Hvis der inden for de første 24 måneder efter køb opdages mangler på udstyret og de tilhørende komponenter som følge af produktions- og materialefejl, kan Siemens frit vælge, om man vil foretage ombytning med et nyt, tidssvarende udstyr eller afhjælpe manglen gennem reparation. På dele, som udsættes for slitage (batterier, tastatur og bælteclips), ydes 6 måneders produktgaranti.
- Garantien bortfalder, hvis manglen skyldes forkert anvendelse og/eller manglende overholdelse af betjeningsvejledningens instruktioner.
- Garantien kan ikke udstrækkes til at omfatte servicearbejde udført af den autoriserede forhandler eller kunden selv (f.eks. installation, konfigurering og downloadet software). Vejledninger og software leveret på et særskilt datamedium er heller ikke omfattet af garantien.
- Købskvitteringen skal sammen med købsdatoen anvendes ved fastlæggelsen af, om en given reklamation ligger inden for reklamationsperioden. Reklamationer under garantien skal fremsættes senest to måneder efter, at manglen er blevet opdaget.
- Siemens har ret til at beholde udstyr og komponenter, der ombyttes eller returneres til Siemens.
- Garantien omfatter nyt udstyr købt inden for EU. For produkter, der er solgt i Danmark, er garantien udstedt af SSiemens Home and Office Communication Devices GmbH & Co. KG, Schlavenhorst 66, D-46395 Bocholt, Germany.
- Krav, der ikke er omfattet af garantien, kan ikke imødekommes. Siemens kan ikke holdes ansvarlig for driftsforstyrrelser, formuetab eller tab af data og software samt andre informationer, som bruger selv har downloadet/indtastet.
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Glossary

Access Point

An access point, such as the Gigaset WLAN Repeater 108, is the centre of a wireless local network (WLAN). It handles the connection of the wireless linked network components and regulates the data traffic in the wireless network. The access point also serves as an interface to other networks, e.g. an existing Ethernet LAN or via a modem to the Internet. The operating mode of wireless networks with an access point is called Internet.

Auto Connect

Auto Connect means that applications such as Web browser, Messenger and Email automatically open an Internet connection when they are launched. This can lead to high charges if you do not have a flat rate arrangement. This function can be deactivated to save call charges.

Broadcast

A Broadcast is a data packet not directed to a particular recipient but to all the network components on the network.

BSSID

Basic Service Set ID

BSSID permits unique differentiation of one wireless network (WLAN) from another. On the Internet, the BSSID is the MAC address of the Access Point. In wireless networks in Ad-hoc mode, the BSSID is the MAC address of any one of the participants.

Client

A Client is an application that requests a service from a Server. For example, an http Client on a PC in a local network requests data, i.e. Web pages from an HTTP Server on the Internet. The network component (e.g. the PC) on which the Client application is running is often also called a Client.

DHCP

Dynamic Host Configuration Protocol

DHCP handles the automatic assignment of IP address to network components. It was developed because in large networks – especially the Internet – defining IP addresses is very complex as participants frequently move, drop out or new ones join. A DHCP server automatically assigns the connected network components (DHCP Client) from a defined IP pool range to Dynamic IP address, thus saving a great deal of configuration work. In addition, the address blocks can be used more effectively: since not all participants are on the network at the same time, the same IP address can be assigned to different network components in succession as and when required.

The Gigaset WLAN Repeater 108 includes a DHCP Server and so it can automatically assign IP addresses for the PCs on its local network. You can specify that the IP addresses for certain PCs are never changed.

DHCP Server

See DHCP

DNS

Domain Name System

DNS permits the assignment of IP addresses to computers or Domain names that are easier to remember. A DNS server must administer this information for each LAN with an Internet connection. As soon as a page on the Internet is called up, the browser obtains the corresponding IP address from the DNS Server so that it can establish the connection.

On the Internet, the assignment of domain names to IP addresses follows a hierarchical system. A local PC only knows the address of the local Name Server. This in turn knows all the addresses of the computers in the local network and the next higher Name Server, which again knows addresses in its network and that of the next Name Server.

DNS-Server

See DNS

Domain name

The Domain name is the reference to one or more Web servers on the Internet. The Domain name is mapped via the DNS service to the corresponding IP address.

DSL

Digital Subscriber Line

DSL is a data transmission technique in which a connection to the Internet can be run at 1.5 Mbps over normal telephone lines. A DSL connection is provided by an Internet Provider. It requires a DSL modem.

Dynamic IP address

A dynamic IP address is assigned to a network component automatically via DHCP. This allows the IP address of a network component to change every time it registers or in certain time intervals.

See also Static IP address

Encryption

Encryption protects confidential information against unauthorised access. With an encryption system, data packets can be sent securely over a network. The Gigaset WLAN Repeater 108 uses WEP encryption for secure data transmission over wireless networks.

Ethernet

Ethernet is a network technology for local networks (LAN) and has been defined by the IEEE as Standard IEEE 802.3. Ethernet uses a base band cable with a transmission rate of 10 or 100 Mbps.

Gateway

A gateway is a device for connecting networks with completely different architectures (addressing, protocols, application interfaces etc.). Although it is not totally correct, the term is also used as a synonym for Router.

Global IP address

See Public IP address

HTTP Proxy

An HTTP proxy is a Server that network components use for their Internet traffic. All requests are sent via the proxy.

IEEE

Institute of Electrical and Electronics Engineers

The IEEE is an international body for defining network standards, especially for standardising LAN technologies, transmission protocols and speeds, and wiring.

IEEE 802.11

IEEE 802.11 is a standard for wireless LANs operating in the 2.4 GHz band. In a so-called Internet, terminals can be connected to a base station (Access Point) or they can connect with each other spontaneously (Ad-hoc mode).

Internet

The Internet is a wide-area network (WAN) linking several million users around the world. A number of Protocol have been created for exchanging data, and these are known collectively as TCP/IP. All participants on the Internet can be identified by an IP address. Servers are addressed by Domain names (e.g. siemens.com). Domain names are assigned to IP addresses by the Domain Name Service (DNS).

Among the most important Internet services are:

- electronic mail (email)
- the World Wide Web (WWW)
- file transfer (FTP)
- discussion forums (Usenet / Newsgroups)

Internet Provider

An Internet Service Provider offers access to the Internet for a fee.

IP

Internet Protocol

The IP Protocol is one of the TCP/IP protocols. It is responsible for addressing parties in a network using IP addresses, and routes data from the sender to the recipient. It decides the paths along which the data packets travel from the sender to the recipient in a complex network (routing).

IP address

The IP address is the unique network-wide address of a network component in a network based on the TCP/IP protocol (e.g. in a local network (LAN) or on the Internet). The IP address has four parts (decimal numbers) separated by full stops (e.g. 192.168.2.1). The IP address comprises the network number and the computer number. Depending on the Subnet mask, one, two or three parts form the network number, the remainder form the computer number. You can find out the IP address of your PC using the `ipconfig` command.

IP addresses can be assigned manually (see Static IP address) or automatically (see Dynamic IP address).

On the Internet Domain names are normally used instead of the IP addresses. DNS is used to assign domain names to IP addresses.

IP pool range

The Gigaset WLAN Repeater 108's IP address pool defines a range of IP addresses that the router's DHCP Server can use to assign Dynamic IP addresses.

ISP

Internet Service Provider see Internet Provider

LAN

Local Area Network

A local network links network components so that they can exchange data and share resources. The physical range is restricted to a particular area (a site). As a rule the users and operators are identical. A local network can be connected to other local networks or to a wide-area network (WAN) such as the Internet.

With the Gigaset WLAN Repeater 108 you can connect a wired local Ethernet network to a wireless IEEE 802.11g standard network.

Local IP address

See Private IP address

MAC address

Media Access Control

The MAC address is used for the globally unique identification of a Network adapters. It comprises six parts (hexadecimal numbers), e.g. 00-90-96-34-00-1A. The MAC address is assigned by the network adapter manufacturer and cannot be changed.

Mbps

Million bits per second

Specification of the transmission speed in a network.

Network

A network is a group of devices connected in wired or wireless mode so that they can share resources such as data and peripherals. A general distinction is made between local area networks (LAN) and wide-area networks (WAN).

Network adapter

The network adapter is the hardware device that implements the connection of a network component to a local network. The connection can be wired or wireless. An Ethernet network card is an example of a wired network adapter. The Gigaset PC Card 108 and the Gigaset USB Adapter 108 are examples of wireless network adapters.

A network adapter has a unique address, the MAC address.

Private IP address

The private IP address is a network component's address within the local area network (LAN). The network operator can assign any address he or she wants. Devices that act as a link from a local network to the Internet have a private and a Public IP address.

Protocol

A protocol describes the agreements for communicating on a network. It contains rules for opening, administering and closing a connection, about data formats, time frames and error handling. Communications between two applications require different protocols at various levels, e.g. the TCP/IP protocols for the Internet.

Public IP address

The public IP address is a network component's address on the Internet. It is assigned by the Internet Provider. Devices that act as a link from a local network to the Internet have a public and a Private IP address

Rekey Interval

The rekey interval is the period after which new keys are automatically generated for data encryption with WPA-PSK.

Roaming

With Roaming, a number of routers are used to increase the range of the network. The PCs within the network can switch dynamically between several access points.

Router

A router directs data packets from one local area network (LAN) to another via the fastest route. A router makes it possible to connect networks that have different network technologies. For example, it can link a local network with Ethernet or WLAN technology to the Internet.

See also Gateway

Server

A Server makes a service available to other network components (Clients). The term "server" is often used to refer to a computer or PC. However it can also mean an application that provides a particular service such as DNS or a Web service.

SSID

Service Set Identifier

The SSID is used to identify the stations in a wireless network (WLAN). All wireless network components with the same SSID form a common network. The SSID can be assigned by the network operator.

Static IP address

A static IP address is assigned to a network component manually during network configuration. Unlike a Dynamic IP address, a static (fixed) IP address never changes.

Subnet

A subnet divides a network into smaller units.

Subnet mask

The subnet mask determines how parts of the IP addresses of a network represent the network number and how many the computer number.

The subnet mask administered by the Gigaset WLAN Repeater 108 is always 255.255.255.0. That means the first three parts of the IP address form the network number and the final part is used for assigning computer numbers. The first three parts of the IP address of all network components are in this case always the same.

Super G

Super G is an extension of IEEE 802.11g. Channel bundling doubles the maximum transmission rate to 108 Mbps. Unlike other technologies (e.g. 125 Mbps technology), which work by compressing data, here the transmission rate is actually doubled. With data that is already compressed (ZIP, RAR, MP3, MPEG etc.), data compression will not make any substantial improvements.

TCP

Transmission Control Protocol

The TCP Protocol is part of the TCP/IP protocol family. TCP handles data transport between communication partners (applications). TCP is a session-based transmission protocol, i.e. it sets up, monitors and terminates a connection for transporting data.

TCP/IP

Protocol family on which the Internet is based. IP forms the basis for every computer-to-computer connection. TCP provides applications with a reliable transmission link in the form of a continuous data stream. TCP/IP is the basis on which services such as WWW, Mail and News are built. There are other protocols as well.

URL

Universal Resource Locator

Globally unique address of a Domain on the Internet.

WAN

Wide Area Network

A WAN is a network that is not restricted to one particular area, such as the Internet. A WAN is run by one or more public providers to enable private access. You access the Internet via an Internet Provider.

WEP

Wired Equivalent Privacy

WEP is a security protocol defined in the IEEE 802.11 standard. It is used to protect wireless transmissions in a WLAN against unauthorised access through Encryption of the data transmitted.

Wireless network

See WLAN

WLAN

Wireless LAN

Wireless LANs enable network components to communicate with a network using radio waves as the transport medium. A wireless LAN can be connected as an extension to a wired LAN or it can form the basis for a new network. The basic element of a wireless network is the cell. This is the area where the wireless communication takes place.

WLAN is currently specified in Standard IEEE 802.11. The Gigaset WLAN Repeater 108 complies with Standard 802.11g.

WPA

WPA was developed to improve the security provided by WEP. WPA uses complex procedures to generate keys, such as TKIP (Temporal Key Integrity Protocol). In addition, WPA can use an authentication server (e.g. a RADIUS server) to increase security.

WPA-PSK

WPA Pre-shared Key

Variant of WPA data encryption, in which new keys are automatically generated at regular intervals by means of a keyword (Pre-shared Key). The key is updated after defined periods (Rekey Interval).

XR

eXtended Range

XR technology increases a WLAN's range and ensures better coverage of the area in the home or office network. When activated at the access point, this function can considerably increase the range to the network adapters, although at the expense of the data transfer rate.

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